AESCULAPIAN/80

GEN

ALLEN COUNTY PUBLIC LIBRARY
3 1833 01839 8039

GC
975.602
D93DUM,
1980

AESCULAPIAN/80

Editor-in-Chief
John Fair Lucas, III

50TH
ANNIVERSARY
1930-1980

DUKE UNIVERSITY
MEDICAL CENTER
DURHAM, NORTH CAROLINA 27710
1980

AESCULAPIAN STAFF

Editor: John Lucas; *Assistant Editor:* Jeff Davis; *Section Editors:* Febe Brazeal, Laurie Dunn, Berrylin Ferguson, Linda Glaubitz, Candis Grace, Barbara Hodge, Ann Lansing, Val Leightner, Anne McKnight, Gina Michael, Rosanne Pollack, Jan Porter, Pam Reynolds, Meg Richardson, Mike Rocco, Jackie Rutledge, Harry Severance, Pam Sholar, Frank Spence, Margo Thienemann, Jim Walsh; *Sales:* Janet Kinney, Jim Segars; *Ads:* Faith Birmingham, Kemp Kernstine; *Photographers:* John Lucas, *Chief;* Bill Dodson, David Katz, Bruce Murdock, Mitch Silverman, Rich Ward; *Business Manager:* John Lucas; *Secretary:* Judy Pascoe; *Artwork:* Renata Albrecht; *Associate Editor:* Marsha Adams Lucas.

1

OPENING

1 Opening 4

2 Philosophers 18

3 Faces from the Past 34

4 Outstanding Faculty and Alumni 52

5 History 80

6 Alumni 140

7 Administration 240

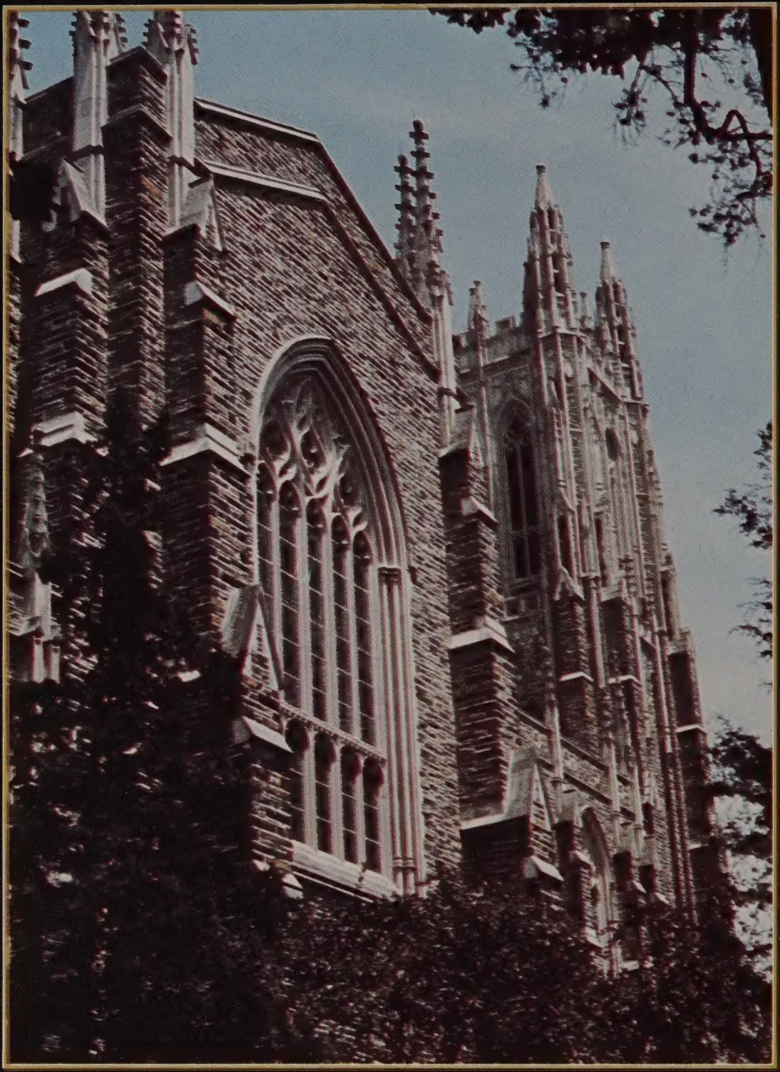
8 The Medical Center 254

9 Organizations and Activities 354

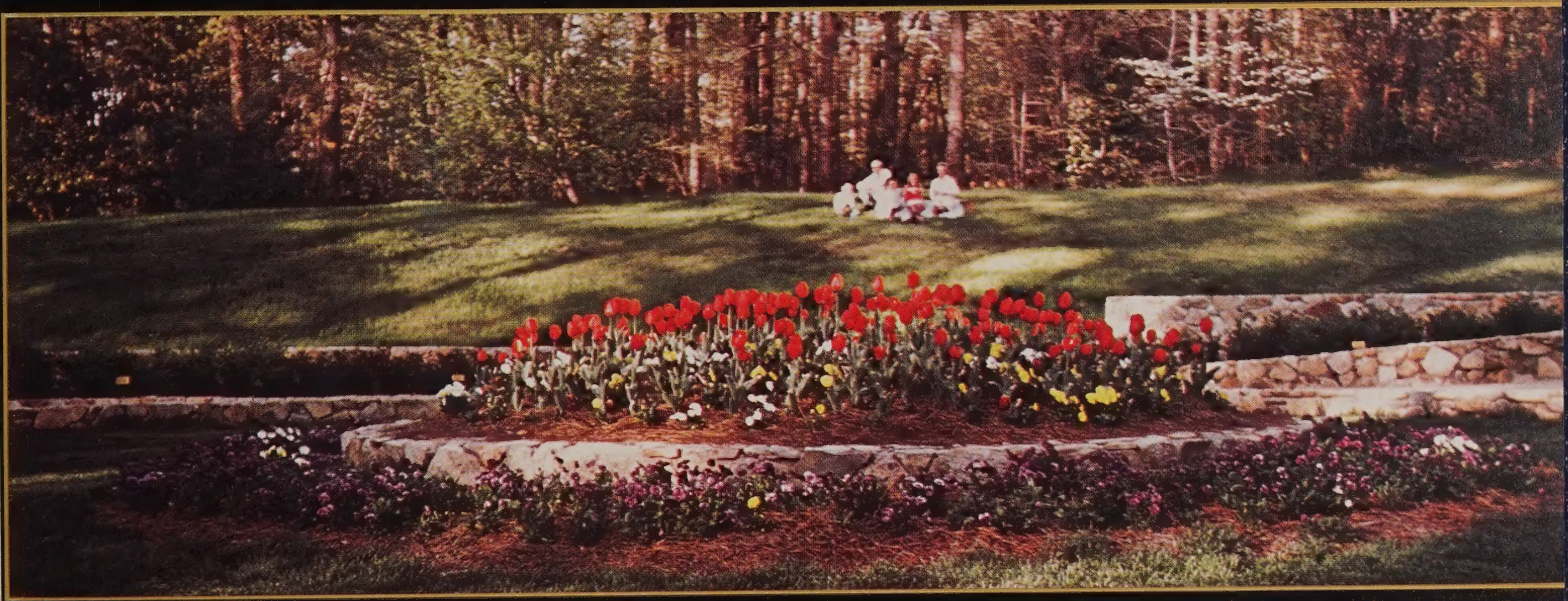
10 Students 386

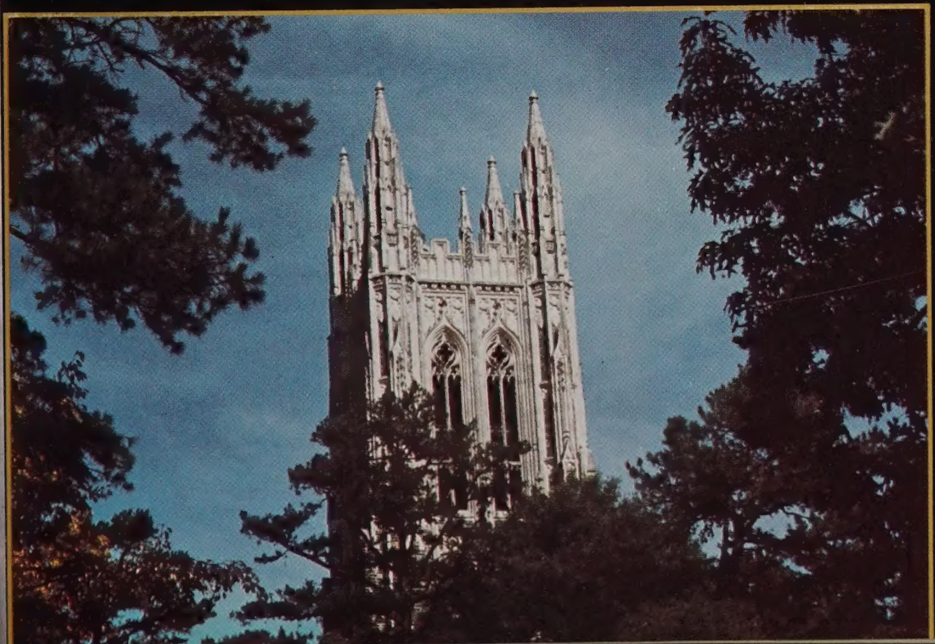
11 Patrons 482

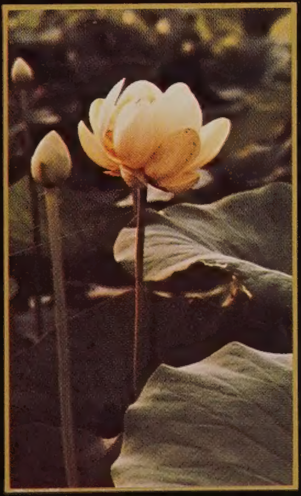
Section Editor
Mike Rocco

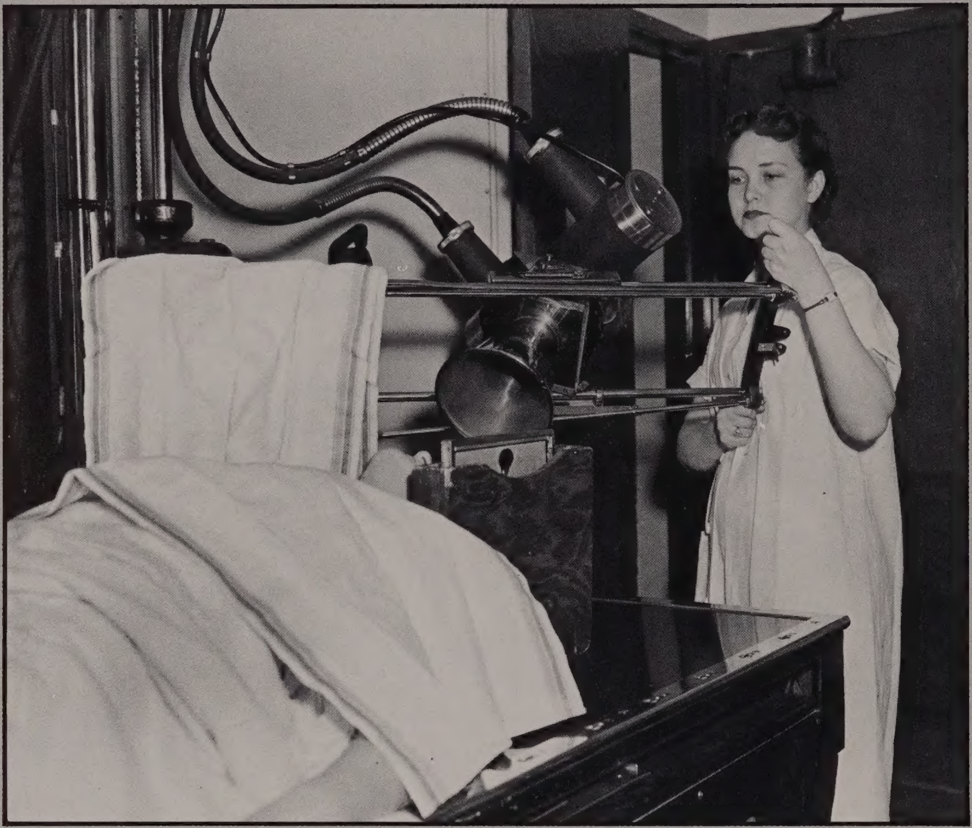


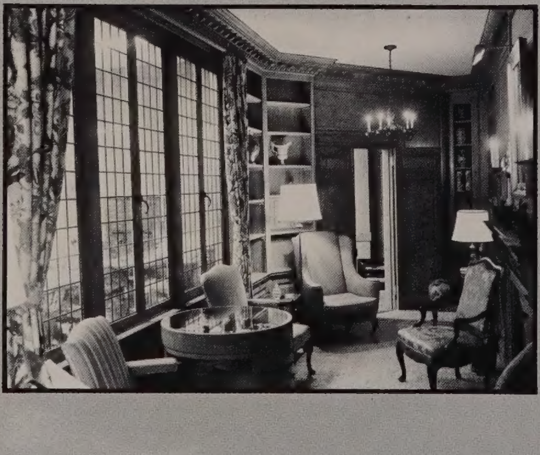
NNIS

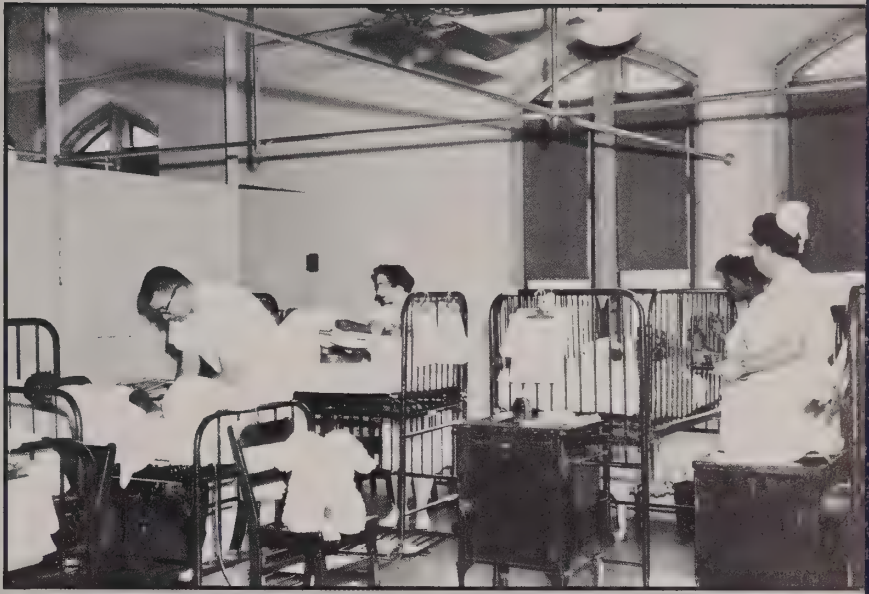




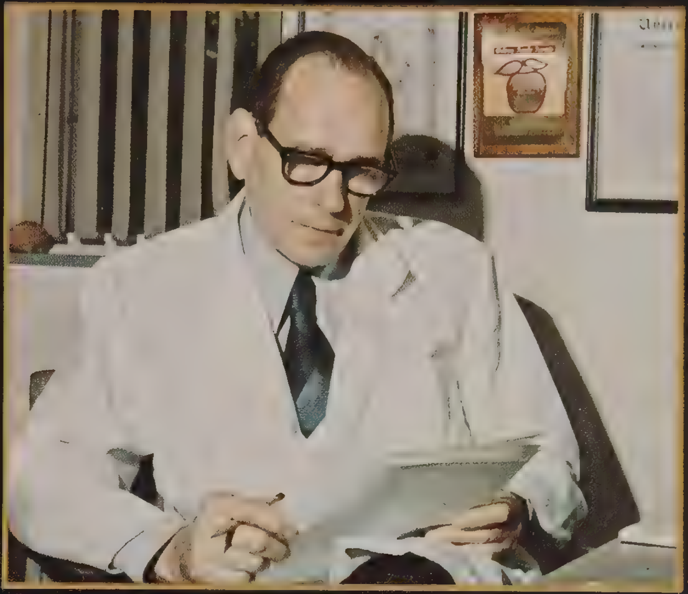






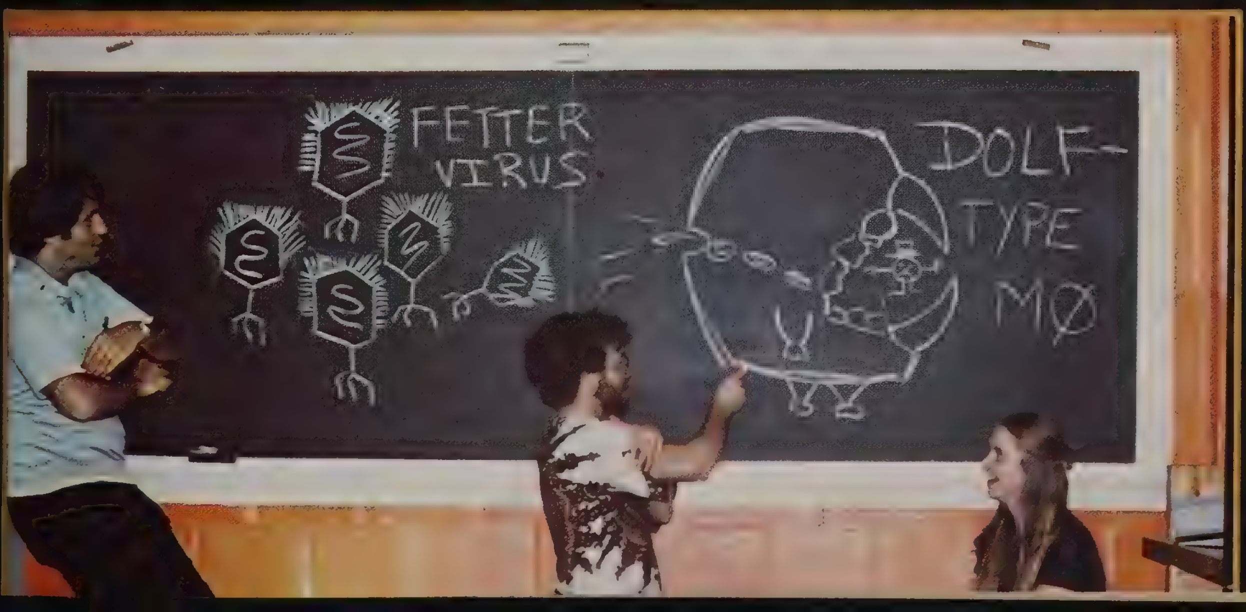


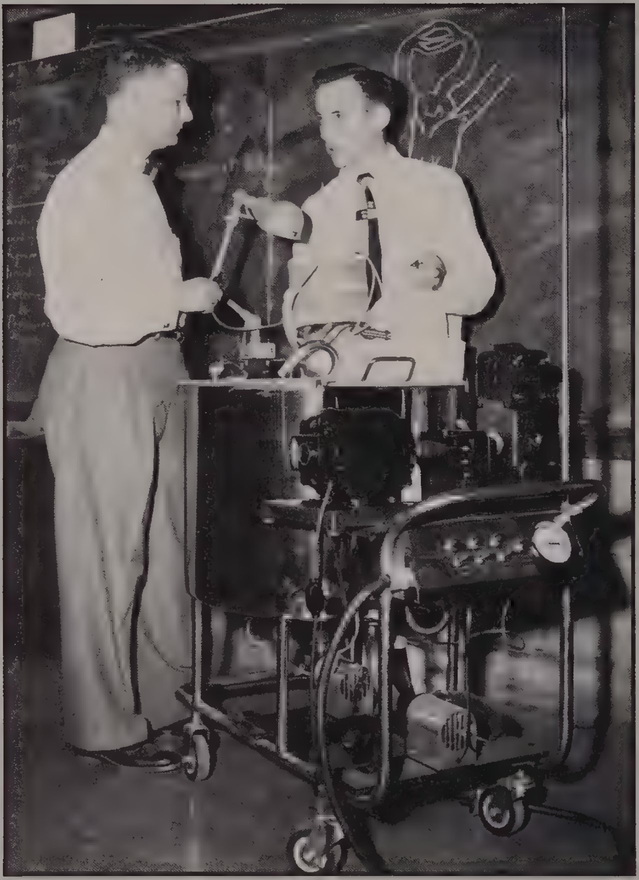
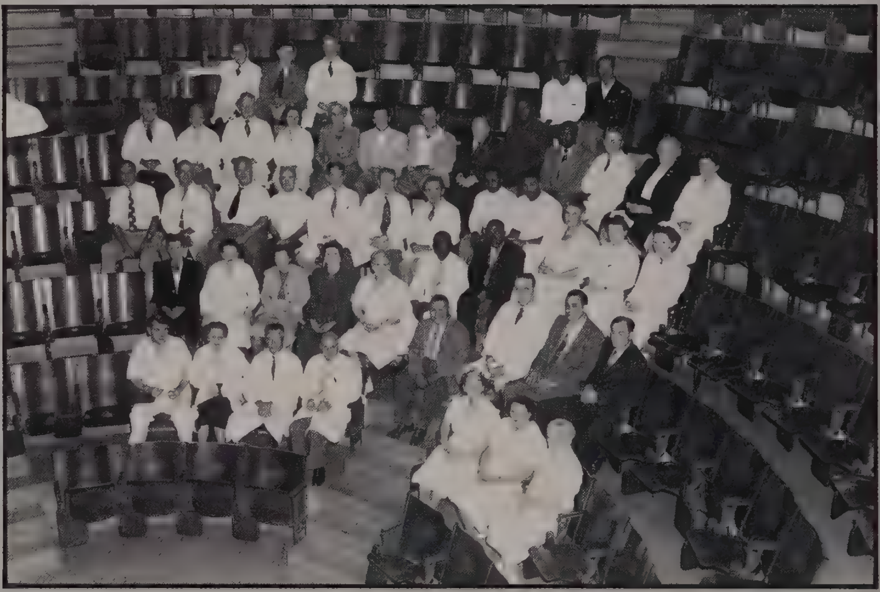
FREDDIES FEED STORE

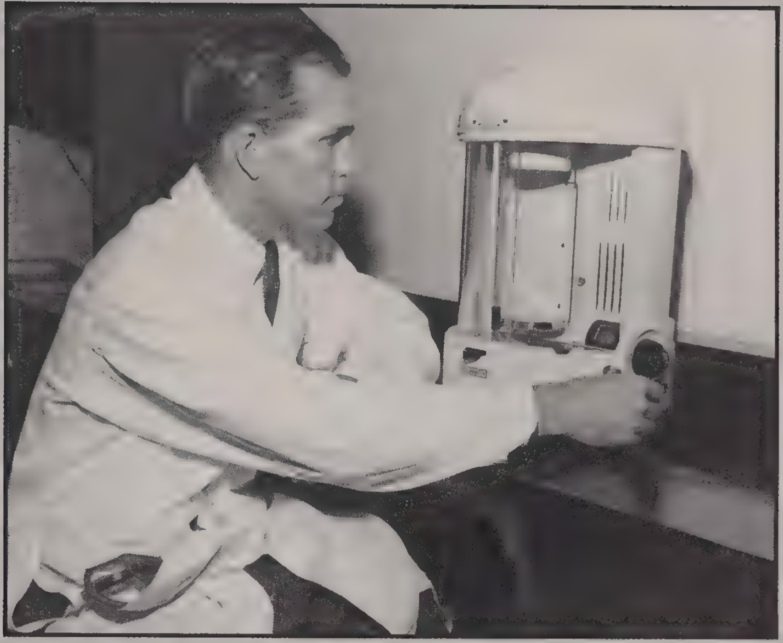


Coke

Nikon
BASIC PATHOLOGY


FETTER VIRUS
DOLF-TYPE MØ

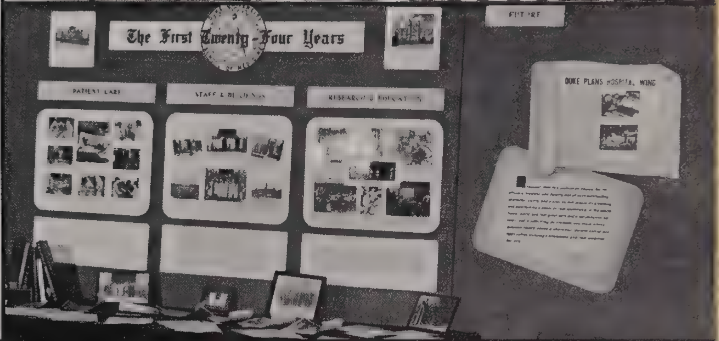


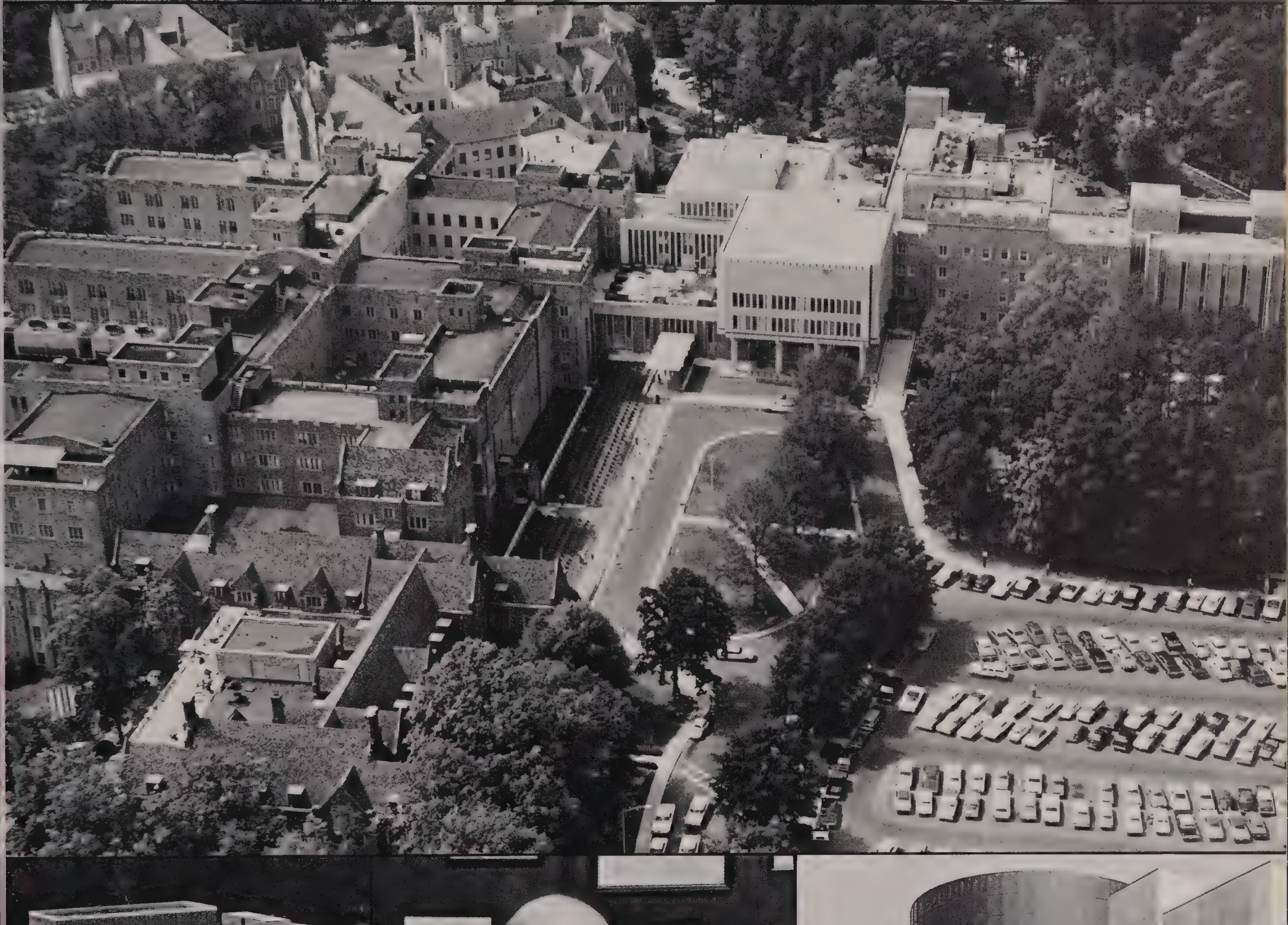
RICH PL

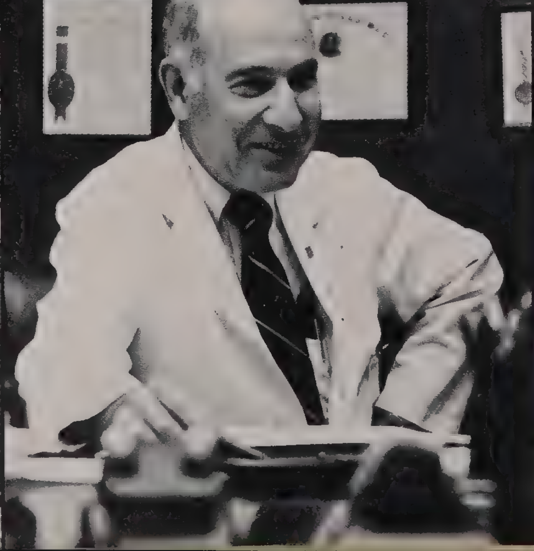
WELCOME TO
DURHAM

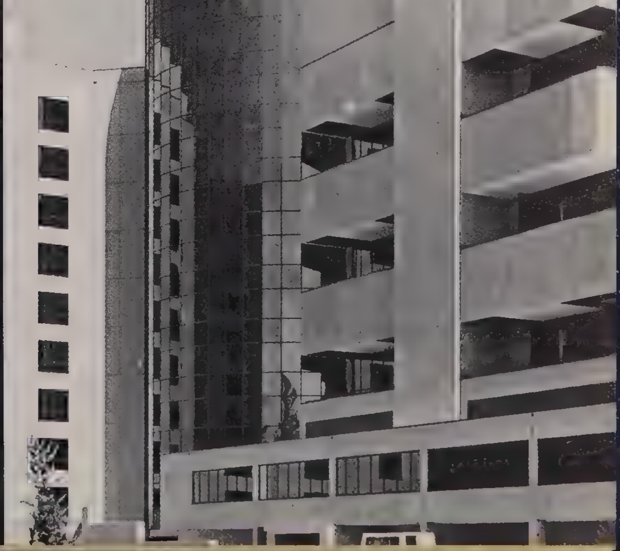
FIVE POINTS DRUG CO

THE ORIGINAL-ESTABLISHED 1867
THE MAKINGS OF A NATION


The First Twenty-Four Years
FUTURE
PATIENT CARE
STAFF & BUILDINGS
RESEARCH & EDUCATION
DUKE PLANS HOSPITAL WING







PHILOSOPHERS

"Let us not forget that a university or a medical college may have large endowments, palatial buildings, modern laboratories, and still the breath of life may not be in it. The vitalizing principle is the men — both teachers and students — who work within its walls. Without this element of life, this bond between teacher and taught, these things are but outward pomp and show. But let these greater opportunities receive the breath of life from the inspiration of great teachers and they then become the mighty instruments of higher education and scientific progress."

William H. Welch

These teachers are responsible for much more than transmission of facts — intangibly they shape many of our attitudes, mold our perspectives. In hopes of adding a bit of depth to some of these personalities we have asked a group of professors to share their philosophies of medicine and medical education. These people are representative of those who seem particularly influential to students at this time, whether it be by virtue of their position, their attitude towards teaching, their compassion, or their perspective on life.

I extend a deep note of appreciation to each of them for their time and effort; and to Gwen Arens, Nanny Dunlap, Debra Clapp, Jan Porter, Lea Sewell and Marsha Adams for their help in the preparation of these pages.

Laurie Dunn

2

PHILOSOPHERS

Arthur C. Christakos 21

David C. Sabiston 22

William G. Anlyan 23

Catherine M. Wilfert 25

John M. Falletta 26

Eva J. Salber 26

Stephen G. Osofsky 28

Wendell F. Rosse 29

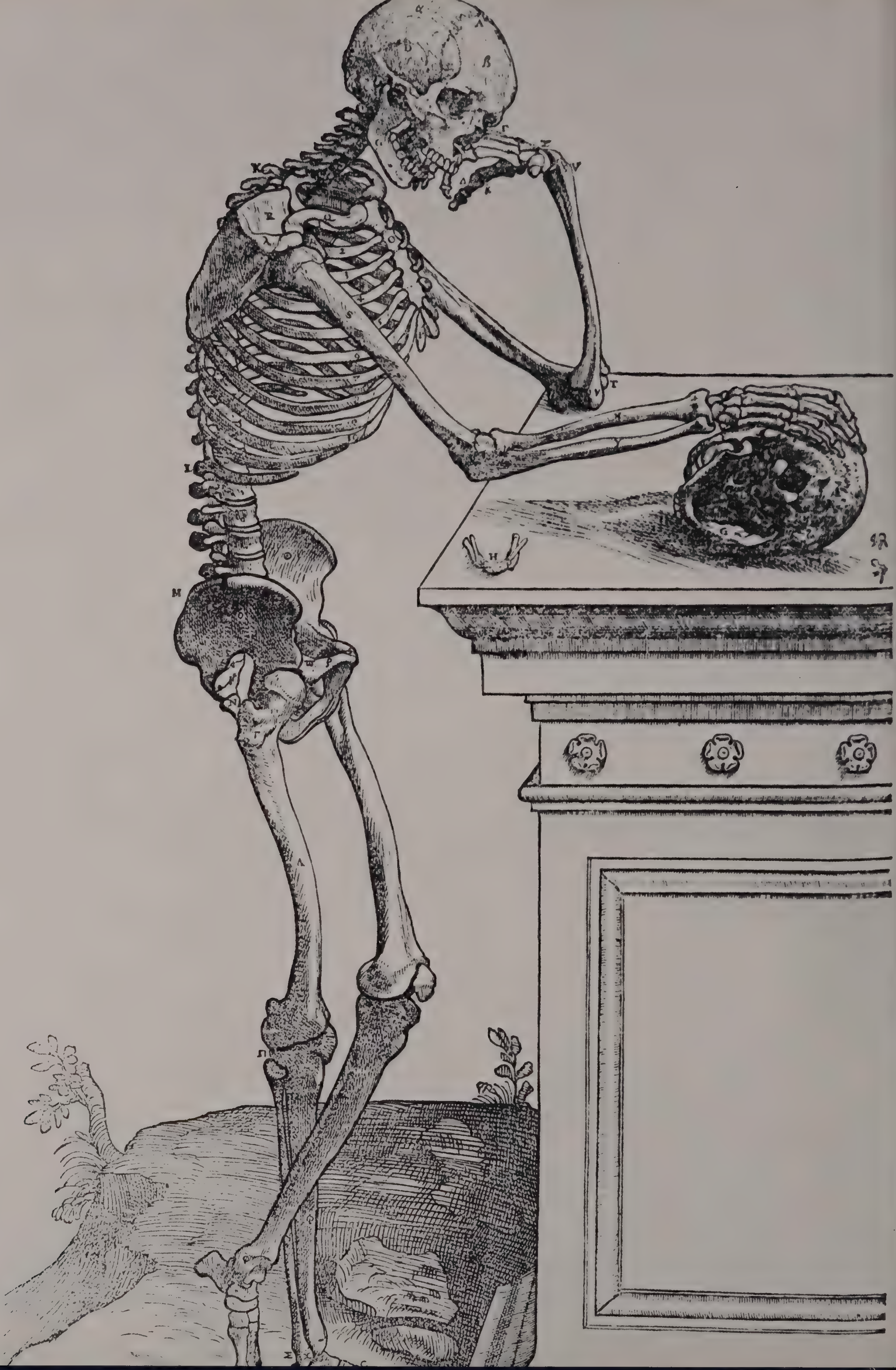
Eugene A. Stead 30

H. Keith H. Brodie 31

Harvey J. Cohen 32

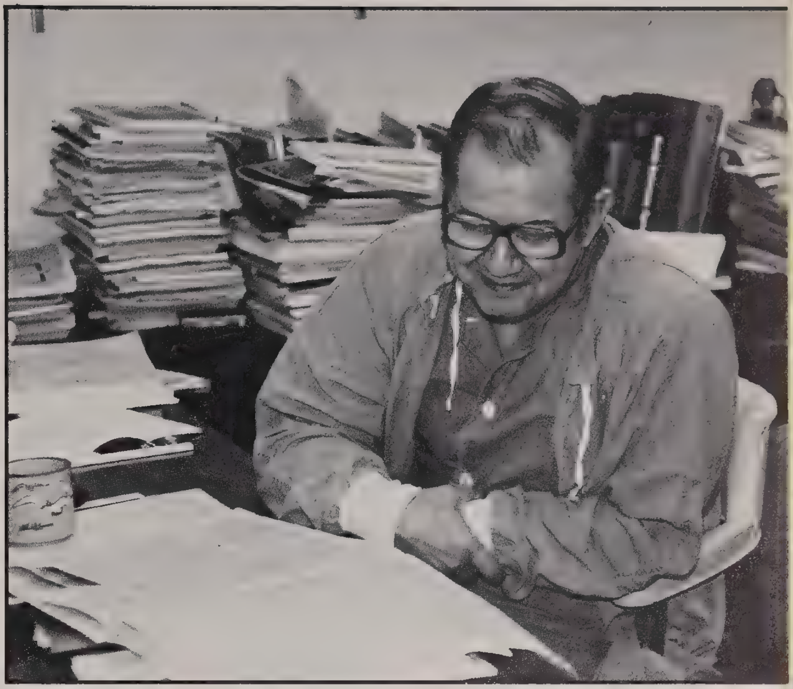
Bernard F. Fetter 33

Section Editor
Laurie Dunn


K
L
M
H
G
Λ
Π
Σ

MEDICINE AND MEDICAL EDUCATION

Arthur C. Christakos, M.D.



It is difficult to think about one's philosophy of medical education and about medicine in general without recalling those in the profession who may have had some influence on one's career choice. Such is the case with me. When I consider these topics, I naturally remember, among others, my former family physician who embodies those characteristics traditionally associated with the doctor — the *iatros*. Whether on a house call, in his office, or at the corner drugstore, he could be identified as **the doctor** by his demeanor, attire, mannerisms, and even by the faint aroma of tincture of iodine which lingered about him. The patient was the most important person in the world to this man, but his warm, sincere, and compassionate concern for the patient did not impair his professional objectivity and detachment so necessary in accomplishing his task. The epitome of discretion, he never betrayed a confidence. His enthusiasm for what he was doing was infectious, and he instilled a sense of encouragement and a positivity in his relationships with people, so that even in hopeless situations, despair was unlikely and dignity prevailed. In addition, it was obvious that his education had not ceased with graduation from medical school. He was constantly reading and improving his skills. He recognized his limitations and was unafraid to seek consultation. His omnipresence was legendary; his integrity, above question.

In the words of another country doctor, "This man had the three A's of being a good doctor — Ability, Affability, and Availability." In these contexts of ability, affability, and availability, I should like briefly to discuss students of medicine and their teachers rather than medicine and medical education.

Ability

It goes without saying that one must have a certain degree of intelligence to become a doctor. Certain other qualities in addition to intelligence are important in becoming and remaining an effective physician. Most doctors have unusually well-developed powers of observation. Some seem to come by this naturally, while others make concerted efforts to develop and improve this faculty. Many advances in medicine have resulted from this ability in those intelligent enough to use it. Being alert and aware are characteristics of the good observer.

Medical teachers must have the ability to help their students improve their powers of observation while inculcating the principles of the scientific method in them. Accurate observations and documentation of facts by both teachers and students make for proper interpretation of data which is essential for problem solving.

Repetition breeds familiarity, and familiarity breeds learning. The ability of teachers to repeat in innovative ways to avoid boredom on the part of their students and the ability of the students to profit from repetition and to expand their understanding from it are important components of any educational process. As one of my mentors once said after being commended for successfully controlling retroperitoneal bleeding during pelvic surgery, "I've been there before!" Practice tends to make perfect.

We all recognize, however, that certain faculties are better developed in some people than in others. The ability of the teacher and the student to recognize those attributes during the medical school experience is helpful in channeling some people into pathology and others into pediatrics, gastroenterology, obstetrics, psychiatry, general surgery, etc.

The student who has a specific interest and who can identify a teacher who has expertise in that area would do well to associate with that mentor as much as possible. Much is learned through dialogue with those who know first hand about a subject. Herein lies one of the major strengths of the Duke curriculum. Many capable faculty are actively involved in the established procedures of their disciplines and are exploring the frontiers in those areas. Duke students have demonstrated their ability to profit from this over the years by associating directly with those faculty persons.

Affability

In addition to these various abilities, the successful student of medicine and his effective teacher share a secret which is found in their positive attitude. Those students and teachers who seem to be the happiest and most effective are those with enthusiasm for what they are doing. They are the ones who are motivated and have a sense of purpose. They are willing to sacrifice personal pleasures, to be altruistic, to care for those for whom they have professional responsibility, and at the same time, they are able to maintain the balanced perspective necessary for their personal lives including spouses, children, families, friends, society, religion, etc.

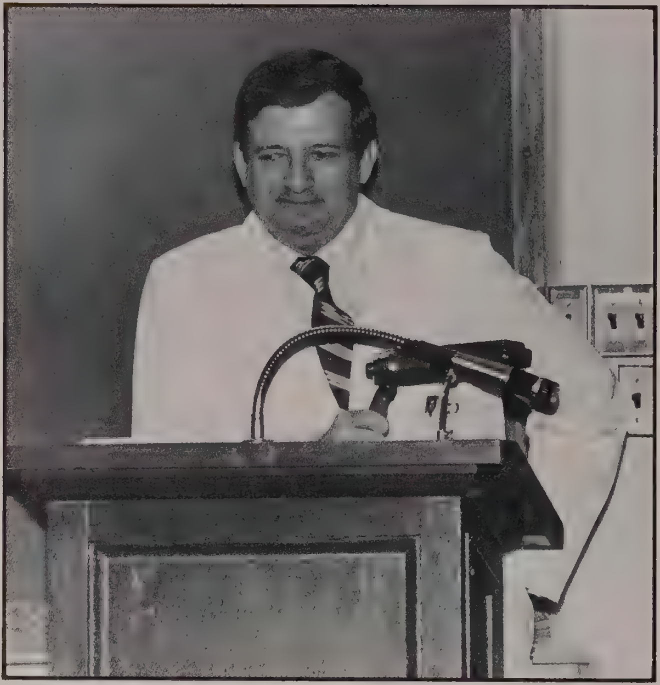
Availability

The able and affable students of medicine and their teachers of the same ilk can be effective only if they are available. The teachers are obligated to make themselves available to their students, and the students are obligated to make themselves available to those situations that are most advantageous to learning throughout their lives. They are also obligated to make themselves available to those people who have entrusted their health to them.

The students of the Duke University School of Medicine impress me as able, affable, and available candidates for the privilege and responsibility of caring for sick people.

The able, affable, and available physicians are the true spiritual descendants of the Greats of Medical History. They seem to maintain bonds with Aesculapius, Hippocrates, Galen, Hunter, Simmelweiss, Virchow, Osler, Best, Taylor, White, Minot, Strudwick, Nott, Cushing, Holmes, Sims, Williams, Davison, Reed, Hohman, Markee, Carter, Smith, Swett, Hart, Stead, Alyea, Baker . . .

Arthur C. Christakos



David C. Sabiston, Jr., M.D.

COMMENTS FOR THE AESCULAPIAN

> MEDICINE: No other profession can boast of the same unbroken continuity of methods and ideals. We may indeed be justly proud of our succession. Schools and systems have flourished and gone, schools which have swayed for generations the thought of our guilds and systems that have died before their founders; the philosophies of one age have become the absurdities of the next, the foolishness of yesterday has become the wisdom of tomorrow; through long ages which were slowly learning what we are hurrying to forget — amid all the changes and chances of twenty-five centuries, the profession has never lacked men who have lived up to these ideals.
>
> — Osler

Medicine, which has attracted the most scholarly and committed students for hundreds of years, continues to stimulate the aspirations of the finest graduates of our colleges and universities. One cannot avoid being astonished at the variety of career opportunities currently available to all those in this select group. Until relatively recently, most physicians were largely of the same mold, but in the past several decades a number of specific opportunities for in-depth specialization have developed. It is this change, more than any other single factor, which has been responsible for the notable advances which have occurred in medical science during this period. Nevertheless, the student who wishes to pursue a broad approach to medicine and to have the responsibility as well as the gratification of caring for a large number of patients and treating a variety of illnesses may still pursue such a course by choosing the field of family medicine. Thus, the medical student today can specifically select a career designed to provide the opportunity to contribute to progress as well as finding happiness in life. This spectrum has been in the state of continuous change during the past several decades, and today a series of widely ranging opportunities are available including community medicine, group practice, part-time affiliation with a medical center, or a full-time university academic appointment. Further still, challenging opportunities are available for physicians in research institutes, industry, government, foundations, and civic enterprises. Bearing these features in mind as the background of modern medicine, it is very gratifying and a much appreciated experience to be invited by the editors of the *AESCULAPIAN* to comment on some personal thoughts about a career in medicine.

In reflecting upon my own experience, Alfred Blalock, a much respected mentor, provided the primary stimulus. In his daily teaching and example, it was apparent that he felt there were few satisfactions in life as meaningful as a combination of clinical and investigative medicine. Becoming convinced of the necessity for thorough clinical training and taking the time required to achieve it, it was also equally clear that if one is to undertake meaningful clinical investigation, then carefully disciplined training in the laboratory is essential. This conviction became stronger as it was recognized that clinical experiences alone were inadequate in providing an appropriate foundation for objectivity in clinical research. For this reason I decided to spend two years in full-time research with Dr. Donald E. Gregg, who had a reputation for being a purist in investigative physiology as well as a world authority on the coronary circulation. To him much credit is due for teaching me the fundamental principles and the basic concepts of research as well as the objective interpretation of experimental data. It is my own belief that such a laboratory experience must of necessity be full-time, without the press of any concomitant clinical responsibilities. Moreover, a significant and continuous period of time must be spent in order to adequately acquire the necessary experience as an investigator. A combination of these experiences places one in an optimal situation for a later combination of research and excellence in the care of patients. Few challenges are as rewarding as original investigation, and one has the clear obligation of reporting such observations in the literature. This in itself is a learning experience since the investigator is called upon to state in clear and precise terms both the description and an interpretation of the specific research. If one is interested in assimilating data in the preparation of a textbook, earlier experiences in experimental and clinical laboratory are very helpful in preparing and editing such works. Moreover, the writing of texts provides a relatively easy way to remain abreast of the current literature and of the changing concepts in diagnosis and therapy.

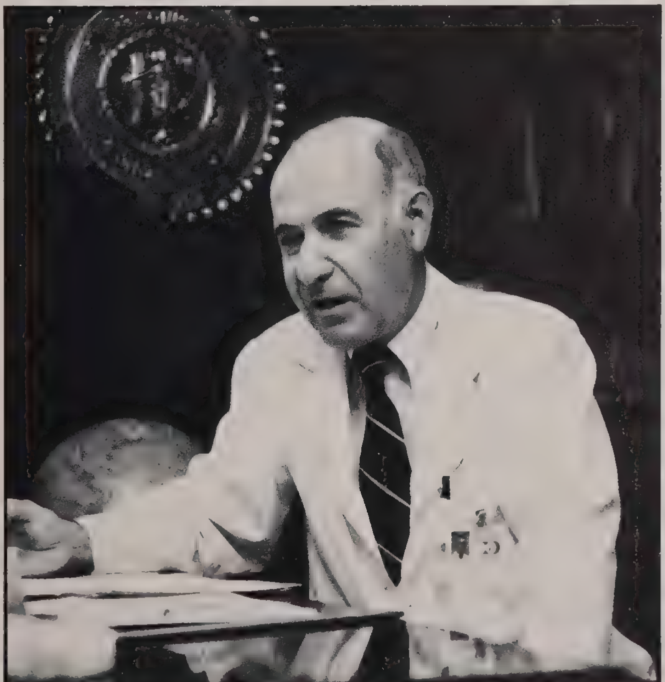
Teaching is another important challenge, especially since it provides an opportunity to relate closely and benefit others. Few privileges are more meaningful than the training of bright and committed students for careers in medicine. Their achievements bring much more happiness than one's own successes, and there is the added gratification that the students themselves will rapidly experience the stimulation and happiness derived from such contributions. For example during the past decade, thirty-six Chief Residents have completed the training program in General and Cardiothoracic Surgery and thirty of them currently hold appointments in university medical centers and six are in the private practice of surgery. It should be emphasized that in training programs a combination of those who are solely interested in academic work as well as those who are solely interested in clinical practice is very important, since neither alone is nearly as stimulating as the opportunity of working with both groups. There are many features which underscore the productivity of these residents including the fact that last year forty-four publications appeared in the scientific literature which originated from Residents in the Department as the primary authors. The leadership roles which these young men and women achieve both locally and nationally provide them increasing confidence as well as genuine happiness which is also shared by their families and friends.

In being asked to comment specifically on a philosophy of life, it is readily admitted that in the past I have seldom given much time on philosophical thoughts. Rather, it has seemed appropriate to learn as much as possible from respected leaders and to seize upon certain relevant quotations, both past and present, which have meaning and special appeal. If one follows the mainstream of life, problems, perplexities, and disappointments can be anticipated as well as success and happiness. Winston Churchill provided sound advice when he said, "The only guide to a man is his conscience; the only shield to his memory is rectitude and sincerity of his actions. It is very imprudent to walk through life without this shield, because we are so often marked by a failure of our hopes and upsetting of our calculations; but with this shield, however the fates may play, we may always be in the ranks of honor."

Another feature deserving specific recognition is the importance of flexibility in daily life. This is very aptly expressed in the Socratic statement, "A man though wise, should never be ashamed of learning more, and must unbend his mind . . . and so the ship that will not slacken sail, the sheet drawn tight, unyielding overturns. She ends the voyage with her keel on top . . . " The message of being alert to the need for change, when change is prudent, is indelibly clear.

Finally, this writer has never found a statement which captures the prescription for a successful and happy career in medicine as well as that of Sir William Osler. When asked by the medical students at Yale for the reasons explaining his own attainments, Osler was very forthright, "It seems a bounden duty on such occasions to be honest and frank, so I propose to tell you the secret of life as I have seen the game played, and as I have tried to play it myself . . . This I propose to give you in the hope, yes, in the full assurance that some of you at least will lay hold upon it to your profit. Though a little one, the master-word looms large is meaning: WORK. It is the open sesame to every portal, the great equalizer in the world, the true philosopher's stone, which transmutes all the base metal of humanity into gold. The stupid man among you it will make bright, the bright man brilliant, and the brilliant student steady. With the magic word in your heart all things are possible, and without it all study is vanity and vexation. The miracles of life are with it . . . To the youth it brings hope, to the middle-aged confidence, to the aged repose . . . It is directly responsible for all advances in medicine during the past twenty-five centuries."

David C. Sabiston



William G. Anlyan, M.D.

THE FUTURE OF MEDICAL EDUCATION
A View Toward The 21st Century

It is tempting to say that I never look back, but it simply is not true. Though it is more fun to think and plan for the future, past history has the sobering impact of attempting to minimize the recycling of previous mistakes made in the United States and abroad.

Medical and health science education in the past 200 years provides an objective launching pad from which we may extrapolate future changes. Some of the directions we are currently following have proven disastrous in other countries. At times, elements of our national leadership appear to be wearing blinders; the day-to-day preoccupation with complex problems in education and health care are not conducive to careful planning for the future.

In this column, I shall endeavor to touch only a few of the major issues which loom before us in the next two decades. A more complete rendition would require a monograph.

Changes in Admission to Medical School

Today, the starting line to gain admission is located where your parents have decided to work and live. You are locked in an environment which can determine whether or not you are in an educational channel that might lead to admission to medical school. The valedictorian of a small rural high school in North Carolina may not gain admission to one of the nation's top fifty colleges that produce the bulk of successful applicants to medical school. The new North Carolina Residential High School of Science and Mathematics is an experiment to correct this disparity in opportunity. Lessons to be learned from such a model may be replicated in other states and provide one solution to the problem.

At the collegiate level, currently there prevails a unitrack quantitative science rat race to compete for admission to medical school. Only one out of three applicants is successful on the national scene. The remaining two-thirds end up frustrated, angry, and sometimes hostile towards medicine; they may go into careers that surround medicine, but they and their families will never forget the four years of the vicious college race.

The Program to Strengthen the Medical Science Education in College, supported by the Commonwealth Fund of New York City at Duke's Trinity College and seven other universities, is one attempt to provide alternative pathways to medicine. It makes available respectable tracks to other careers in health and fields related to medicine. It defuses the quantitative biological science unitrack as an all or none option. Youngsters gain a practical field experience in health care to get a "feel" for the trenches by working as volunteers in hospitals and clinics. It provides the opportunity to sample the basic medical sciences while in college. The early provisional acceptance to medical school as sophomores in college gives the student an opportunity to select broader non-science courses in the humanities and social sciences. Consideration for future careers in economics, political science and law at the interface with medicine have exposure to what medicine and health care is all about in the process of formal collegiate education.

Current medical school admission committees do the best job possible today. They are more discriminating than other professional and graduate programs that tend to formulate criteria that consider grades and aptitude tests exclusively. Interviews and letters of recommendation may be helpful at both ends of the intellectual spectrum; they can weed out the genius who belongs in a laboratory doing research rather than taking care of sick fellow human beings. I have no clear solution to propose and will continue to agonize about this issue.

The Medical School Experience

Clearly, the elective curriculum instituted in 1966 at Duke has been successful at this institution. It is the way of the future as useful medical information increases exponentially. We recognized in the 1960's that it was no longer possible to expose medical students to **all** pertinent medical knowledge. The first two years were tailored to acquaint the student with the **language** of biomedicine and the **process** of problem solving. The last two years provided the opportunity to sample specific areas in depth. An additional dimension will have to be added — the **changing process of decision-making** as well as the changing information base. The evolving physician-computer interface is constantly a changing process. The Myocardial Infarction Research Unit (MIRU) instituted at Duke in 1967 is a splendid example of how decisions will be made in the future regarding the care of patients with coronary artery disease. Human memory becomes increasingly fallible. The clinical experience of one physician is an insufficient data base for decision-making. The MIRU model is already being adapted to the field of cancer. In succession, other diseases will be managed with the same process and will be used by medical students, residents and clinicans. The data base will be made available to community physicians by satellite terminals. Already proven to be cost-effective, the computer-physician process should be supported by third party insurance as a mechanism for a higher quality of care and for cost containment. Having an objective basis to sort out patients with myocardial infarction who can be discharged in 5-7 days instead of 21 days will be increasingly important as the per diem in coronary care units climbs up to $1000 per day in the 1980's.

Changes Anticipated in Residency Training

Because of the interdependence of clinical services, institutions will need to be accredited for graduate medical education. The patient with heart disease coming to a teaching hospital requires a spectrum of bench strength in medicine or pediatrics, radiology, surgery and anesthesiology. Each is an important link and quality cannot be unacceptable in any one. Today, Residency Review Committees and the various specialty board tend to look at individual programs. The patient may be in jeopardy if one residency training program is "on confidential probation" unbeknownst to the others. Some mechanism such as the Liaison Committee on Graduate Medical Education will need to have muscle at the national level to accredit teaching hospitals aspiring to provide residency training. As a second "set of teeth," the Joint Commission on the Accreditation of Hospitals should not accredit hospitals with residency programs that are not certified by the LCGME.

Other issues that will evolve in the 1980's will be the problem of accomodating the larger crop of graduating MDs into available Year I Residency Programs. As the LCGME improves quality by accreditation, some residency slots may be discontinued. It is possible that we may see a situation comparable to France and Spain where the number of Year I slots are less than the number of graduating MDs. A clear trend is already in view to correct "speciality maldistribution." Recent graduating classes have listed not only their preferred internships for the specialty of choice but for other less sought specialties as well.

Finally, we can anticipate changes in the financing of residency training. To date, each specialty board has designed the criteria for accomplishing residency programs. There is no across the board consideration of whether the trainee is still a dependent highly supervised individual or if, indeed, he or she can be considered to be a relatively independent junior staff person — e.g., the 8th year resident in cardiac surgery.

Residents are currently supported by the patient care budgets of teaching hospitals. It makes more sense to support the current more senior "relatively independent" residents on the same basis as the faculty, be it fee-for-service or some other basis.

Collectively, residents do not have a comfortable national voice. They are being wooed by the AMA as future members thereof; they are sought by the unions as "employees" of hospitals. The medical educational associations need to incorporate the legitimate interests and membership of the 64,332* residents in the teaching hospitals of the United States.

Continuing Medical Education

This is probably the biggest challenge of them all. Why? The average duration of compartments in the continuum of medical education is as follows: Premed — 4 years, medical school — 4 years, residency — 4 years, continuing education — 35 years. Given the 5-year half-life of useful information in biomedicine and the changing process of learning and practice, continuing medical education is a sleeper. In the 1980's and 1990's, there will be a shift in the center of gravity of educational programs in the continuum of medicine, from medical school and residency training to continuing education. Fortunately, by our current tax laws, it is possible to be a self-financing area.

How to do it? Unfortunately, at this time we know what works and what doesn't in continuing education at the extremes. We have no objective basis on which to judge the "smorgasborg" of offerings on the international scene. Evening lectures that follow long cocktail hours and massive dinners probably are inconsequential. Spending a month every two years with the house staff as a fellow in a given specialty at an academic medical center to learn new diagnostic and therapeutic skills is probably effective. Evaluating the net impact of a specific type of continuing education program on the patient care of a given practitioner is lacking.

Humanism in Medicine

Of significant concern is the question: "Does the increasing science and technology of medicine put it in an adversarial relationship with treating patients and their families as human beings?" My answer is a hopeful, resounding "no"!! I would not be honest if I did not express my grave concern in this issue. As the complexities of diagnosis and treatment increase exponentially, there has been a decrease in the ability of the physician to communicate with the patient and the family. The role models of faculty were never perfect. In the 1940's and 1950's, we still had professors who denied the patient the truth about having cancer; it put the patient and the knowledgable family in a difficult situation. Today, the problem with the clinician is not "protecting the truth" to avoid shocking the patient, but a lack of awareness of how to communicate effectively with the patient and the family.

It behooves faculty members to behave as role models for the medical students and the residents. Furthermore, the subject of communication process should be incorporated in clinical rounds. What to say — how to say it — where to say it! The effectiveness of the physician in communication has a domino impact on other health professionals who have to deal with patients and their families. The poor physician communicator can have a devastating emotional impact on the patient, the family and the other health professionals. A striking example of the latter is the resident who is insecure and anxious about death and dying; a five-minute negative contact of that physician with a terminal cancer patient can leave an horrendous emotional problem in the lap of the nursing staff on that ward. The physician can leave expeditiously, but the nurse assigned to the patient has to cope with the problem for hours on end. A "fatigue syndrome" of nursing personnel on cancer wards has evolved. Many of the complaint letters I receive are due examples of poor physician-patient communications and indicate the need for humanism in medicine in the form of more empathy and understanding for patients by future medical students and residents.

William G. Anlyan

*Directory of Residency Training Programs for 1979-80. Published by The American Medical Association. Feb. 1980.

Catherine M. Wilfert, M.D.

Young adults in medical school are a heterogeneous group of talented, highly motivated, unique individuals who have already accomplished a great deal during their undergraduate years. There can be no doubt that the diverse backgrounds of the students contribute a great deal to the interactions of the students with each other and with the faculty. One of the rewarding aspects of being a teacher in the Duke Medical School environment is observing the mutual respect which students have for one another. During the third year of medical school when more time is available for thinking and integrating information, it is delightful to see the student interactions as they share information with one another and learn by discussions with their peers.

The Duke Medical School curriculum is unique. The first year provides a vocabulary and exposure to an insurmountable quantity of information. The second year clinical clerkships then expose the student to disease processes and people. The variability of diseases, the sometimes overwhelming sadness of illness, and the frustrations and pleasures of caring for people become a strong motivating force for integrating basic science information and returning to obtain additional facts from the basic sciences when necessary. The relative freedom of the third and fourth years at Duke provide the opportunity for further enhancement of the basic science background of our students, as well as for continued acquisition of clinical skills. This time allows the student to develop a critical approach to acquiring information, to assimilate further facts, and to develop the ability to solve problems relevant to the practice of medicine. The development of these skills is far more important then the individual facts which are acquired during medical school. The education of students can be successful only if they develop this ability and acquire confidence in solving each problem as it presents itself.

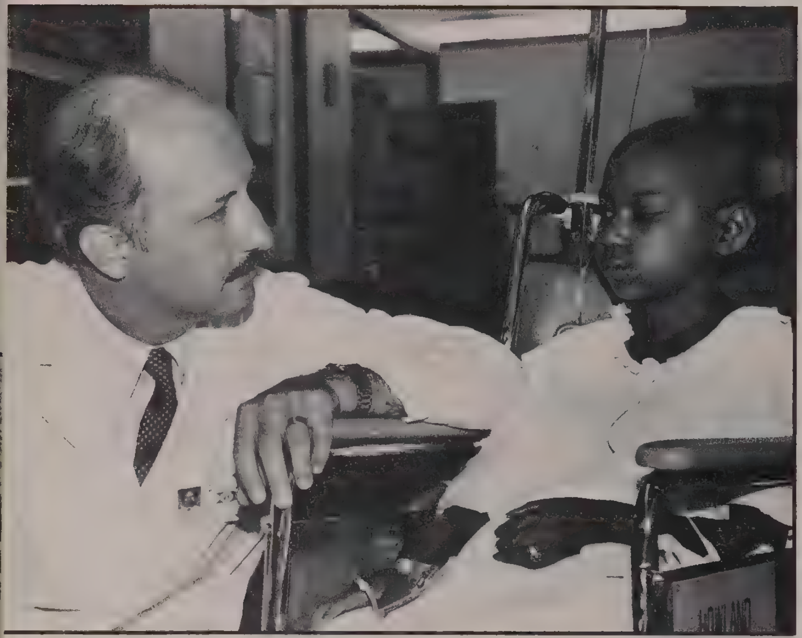
The factual foundation provided by medical school must be built upon during the productive lifetime of the student. This obligates the medical school to provide the factual background but even more importantly, to help students understand the need for continuing acquisition of knowledge. Not only do students need to continue learning from the literature, but also from their own experiences in medicine. The guiding principle must be the ultimate concern for providing optimal health care to the individual patient.

There are mutiple pathways which can be pursued within the broad framework of medicine. For example, a student may elect sub-speciality training or may elect to become involved in health care administration; either choice narrows his or her focus in medicine. Such decisions are the province of the student, but based on experiences occuring during their four years in medical school.

Most of us have chosen medicine as a personally satisfying occupation. It is constantly stimulating, sometimes terrifying, and always interesting. This commitment to medicine as a professional career requires great understanding on the part of other persons sharing our lives. Medicine is not an eight hour a day job. Under no circumstances can responsibilities be discarded at the end of a working day. There are ways in which responsibilities can be shared, but the time commitment and anxieties of caring for other persons will consume the majority of the waking hours of most persons in medicine. This is a difficult responsibility to integrate with family life and personal obligations. In particular, for women who elect to have a family and be in medicine, time commitments are sometimes extremely difficult to manage. The biological role of women in bearing children may require compromise with other commitments and certainly requires emotional support. The physiological needs of infants are relatively simple when compared to the emotional needs and demands as they grow and develop daily. This is often not appreciated until such development is observed within the individual home. The joys are more than enough compensation for the difficult times, but unanticipated compromises may occur in the amount of time or the direction of training of individual physicians. Assistance within the household often becomes a necessity for homes with two working persons, particularly two physicians. The quality of love and care within the home are far more important than the number of hours spent within a home. Thus, with planning, compromise, and hard work, it's possible to reap the enjoyment of a happy personal life as well as the fulfillment of a satisfying career.

Finally, a personal note of gratitude to the students who provide the motivation to continue teaching. Perceptive questions, refreshing novel approaches to problems and enthusiastic interest in learning are constant stimuli to me to continue learning in order to teach.

Catherine Wilfert



John M. Falletta, M.D.

AUTHORITY AND COMPASSION

The experiences of medical school have helped you prepare to change roles — from being a well-educated young adult to becoming a physician. As a physician you will have unique authority — to physically intervene on behalf of a patient to help restore health. While others may have a deep concern for the causes of illness or for the delivery of health care, or may prescribe and perform certain forms of therapy, only you the physician will have legal authority to direct and participate in all aspects of comprehensive patient care.

Your medical education prepares you to assume this new authority, but it must also prepare you to assume new responsibilities — those of providing informed and compassionate care to people. Rather than being on a pedestal, where one with your newly acquired authority might be found, becoming a physician means becoming immersed in all aspects of human experience while using your authority to benefit people. You will come to know thousands of individuals as they become your patients, and you may know them as no one else does. They may care very little about the science, i.e., the cause, prevention and therapy of their illness, but they will seek to reacquire health by benefiting from your authority and talents as a medical scientist. However, they will need much more than the science you have learned, since very few of your patients will be cured of all their ills by your intervention.

In order to properly care for you patients, you must maintain a commitment to them, to science, and to yourself. The process of first detecting illness is currently a job primarily for the patient, but defining the illness, understanding its development, knowing how and when to intervene, and knowing when to modify care using new techniques are your responsibilities as a physician. This commitment to science, at least to that body of medical facts and practice which is currently accepted, is emphasized in medical school and is apparent in the performance of medical students. Sometimes less apparent is an understanding of when to add new or different methods of care to the currently accepted therapeutic programs, when to experiment on humans, or by what criteria new information becomes better information. Concepts involved in logical decision making have been presented to you in both abstract and tangible forms. These concepts must be reviewed and consistently practiced in order to help you know when to reject a particular idea, or with what level of certainty a concept may be accepted.

Caring for patients requires providing compassionate care, which includes having an understanding of what it is that the patient gives up by being ill. Caring also includes having a sense of how to help the patient reduce the sacrifice caused by illness. For many patients, this may simply mean your bending from a rigid schedule to consider their needs and responsibilities when you plan for their continued care. For the patient with progressive disease, this may mean your advising how to make today more important while not giving up hope for tomorrow — to focus on the near term, to help forget the bad moments and to learn to cherish the good.

But to care and to continue caring, you must also care for yourself. To risk emotional commitment to patients whose fate is unclear makes you vulnerable to loss. To frequently risk this loss is too intense for you to cope with alone. The tension must be shared with colleagues who can support you and occasionally relieve you of responsibilities. You must recognize not only your need to care for others but also your need to save some energy for yourself. Your life will change when you receive the physician's authority, but you will remain the same person you always were. People other than your patients will need you for matters often less intense than those you will cope with in medicine. You must learn occasionally to put aside the more dramatic matters so that you may tend to private matters and maintain interests outside of medicine. Giving by becoming immersed in human experiences can lead to one having nothing to give. Remember to save some for the giver.

John M. Falletta

Eva J. Salber, M.D.

PHILOSOPHY

My own experience as a physician living and working in two countries, South Africa and the United States, spans a period of thirty years. During these years three communities have had the greatest impact on my professional and personal development.

The first community was in Durban, South Africa. From 1946 to 1954 my husband and I worked in an Institute of Family and

Community Health as salaried employees of the government health services. The Institute trained doctors, nurses and health assistants to set up community health centers. (At that time these centers were envisaged as the basic units of a proposed national health service which unfortunately never came to pass).

Each center gave truly comprehensive ambulatory services — curative, promotive and preventive — to a geographically defined population. The work was done by teams of doctors, family nurses and health assistants. Except for the doctors, team members were of the same ethnic background as the patients they served. Besides our recognition of the importance of indigenous staff, we accepted the cultural milieu of the African population whom we served including the leadership of the tribal chiefs, the patriarchal system, the extended family, the supportive community networks and the role of indigenous healers.

As family doctors with a holistic approach, we found the work professionally very satisfying. At the same time we were acutely aware of the limited role of medical care in dealing with gross poverty and malnutrition and the overwhelming influence that political, social and economic factors had on health status.

We left South Africa in 1956, and started a new life in the United States. After a nine year stint in epidemiologic research at the Harvard School of Public Health, I became absorbed in another community as Director of the Martha Eliot Family Health Center in Boston. This Center was sponsored by the Children's Medical Center, which had obtained a Children and Youth Grant, and the Boston Hospital for Women, which received Maternity and Infant Care funding from HEW's Children's Bureau. The Martha Eliot Center was located in a low-income city housing project and served both the project's population and that of the surrounding census tracts.

This community at first was as foreign to me as the African community had been. The housing project's population was almost all black and very poor and was surrounded by a hostile lower middle class white Irish population and a rapidly growing Spanish speaking population. The two and a half years I spent working in this community were the toughest and at the same time the most rewarding years of my professional life.

Since only the poor were eligible for low-rent housing, all the project families had severe problems. Ill health, unemployment or underemployment, inadequate police protection, criminal violence and drug abuse was prevalent — as were rats and roaches. The insensitivity of legislative bureaucracy was epitomized by the fact that one section of the housing project had been set aside as housing for the elderly — extraordinarily unsuitable for defenseless citizens. The project was ugly, littered and badly maintained. Elevators malfunctioned, mailboxes were frequently pilfered and tenants mugged.

What could a program of medical care, limited to serving pregnant women, infants and youth up to the age of twenty-one hope to achieve under such circumstances? As in South Africa there was joy in this work which included a large proportion of indigenous manpower, and again as in South Africa, health status depended far more on external environmental, economic, political, and social conditions than on medical care.

The third community is in a rural setting in nothern Durham County, in the adjoining villages of Rougemont and Bahama, which I slowly grew to know when I became Director of the Division of Community Health Models in the Department of Community and Family Medicine. This time I neither gave nor planned the delivery of medical services to this community of about two thousand persons. Rather, I was involved with survey research and community health education, and recently I have become particularly concerned with the lives of elderly residents who live alone in this area. The community is rural, small farm and stable, with lives revolving around the home, work and church. Again, there are environmental problems for many who have inadequate housing with no indoor running water or indoor toilets. There is no public transportation — a particularly difficult problem for the elderly who are faced also with rising costs of food, fuel and rent, which are increasingly difficult to meet on inadequate social security incomes. How much can medical care contribute to the health of this community?

The lessons I have learned from these three communities are simple and fundamental to medical care and medical education.

First, we must look for and work with people's strengths rather than concentrate on their weaknesses. In doing so we must try to separate people's role as citizens from their roles as patients. For if we think of them as citizens who happen to be ill, we will treat them as equals in control of their own lives, but if we think of them only as patients we are apt to be authoritarian and to initiate a dependent relationship. And if we separate our own roles as citizens and as professionals, we can treat biological ills as professionals while helping to fight social ills as citizens.

Second, I believe that health professionals must plan their services and deliver care according to the basic health needs of the communities they serve. This tenet presupposes a knowledge of the communities' own perception of their needs and priorities.

Third, I believe that all health professionals are second contact rather than first contact persons and that primary care is properly centered in the family or other close social support system within the natural (community) social structure. Since professional care is external to that natural structure, it is secondary in function and should be supportive of the primary care givers.

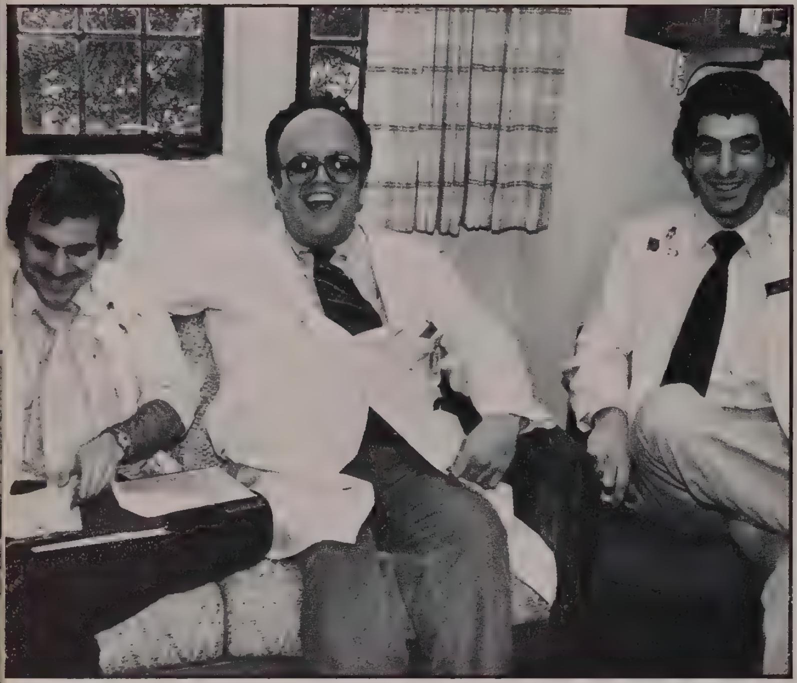
Fourth, I believe that the medical model is inadequate to deal with illness in its social context. The South African experience made this very clear, and Boston and Rougemont / Bahama reinforced this lesson.

Fifth, I believe that we must recognize the importance of peoples' involvement in their own health care, encourage and support this involvement, and develop linkages between professionals and the communities they serve. We can educate every person who comes to us so that they will share responsibility in their own health care. And we can go further than that by trying to identify the natural helpers in a community, and by offering them educational programs, to enhance their effectiveness and thereby raise the health consciousness level of the community.

Lastly, I believe we should encourage and nurture those medical students who believe strongly in a more humanistic approach to medical care. In the last few years I have witnessed many instances of medical students expressing their idealism through community involvement. Examples range from working in migrant worker programs to the community organization efforts of the North Carolina Student Rural Health Coalition; from work in Women's Health Collectives to assisting teenagers in peer counseling on sexual behavior; and from community needs assessment to the establishment of a community controlled clinic.

Clinical medicine has done and is doing much for individuals and their illnesses but community medicine is much broader in scope — it enhances the public's health.

Eva Salber



Stephen G. Osofsky, M.D.

MY PHILOSOPHY ON MEDICAL EDUCATION

To be a good physician an individual must have a sound current fund of knowledge which is utilized in a scientific manner and implemented with personal honesty, compassion, empathy, and interest in the well-being of a patient as an individual.

The responsibility of a medical faculty is to choose those who will enter a School of Medicine, and in doing so they should look for persons of diversified backgrounds, who are intellectually capable, and who embody a strong interest in the total well being of their fellow man so that they are highly motivated to enter the healing arts. An applicant should have demonstrated a past record of personal integrity, honesty, and past activities which indeed reflect his motivation. The faculty, however, should be fully aware that there are many gifted and dedicated individuals in our society who wish to be physicians but have been deprived of prior opportunities in education and in other areas. To these individuals, the medical school must extend admissions and then provide such individuals with full faculty and medical school support in order to overcome possible academic shortcomings. Such support must be intensive, provided by the most talented and dedicated of teachers in the respective areas, and given in an atmosphere of genuine caring.

A medical school is built brick by brick by each of its faculty members. It is built by dedication, excellence, interest in students, and by the ability of each faculty member to serve as a model which can be emulated by the individual student. The worst faculty can put together the best curriculum to provide the worst experience. The relationship between faculty and students should be built on mutual respect. Those faculty members assigned the responsibility for and given the honor of teaching should be interested in teaching, should present material in a carefully prepared, considerate manner, and where possible, should provide insights into clinical applicability. The teacher must temper his enthusiasm in his individual discipline by taking the time to give the novice student a perspective in a new area and an introduction to its vocabulary. Faculty members should be readily available for informal meetings and conferences with students and should not be sequestered either in location or in mental preoccupation.

To foster good teaching, a medical school must put as high a priority on teaching as it does on research and patient care. These are not mutually exclusive, and indeed, the best teaching may be done at the bedside or in the laboratory. However, the pressure applied for faculty publications and grant support should be realistic so as not to infringe on the time necessary for the effective preparation, teaching and student-faculty interaction. Oftentimes, because of excessive medical school pressure for faculty members to attain such grant support, individual faculty may assign low priority to their teaching efforts and to their student contacts. The administration must recognize their teachers as being the mortar that holds the medical school together and must support them financially, philosophically and morally. This attitude is based on the philosophy that teaching, spending time with a student, giving a conference, making rounds, listening to a student's future plans, sitting on a curriculum committee, and writing letters of recommendation are worthwhile and necessary activities.

There is less and less public support and funding available for the teaching effort of medical schools, and as such, a tremendous dependence is placed on the grant support available for research efforts and on the funds generated by patient care. Teaching, however, requires time. Time requires support. Such support translates into the abandonment of clinical academic appointments which serves to rank those who are strictly clinicians below those who do research. It calls for greater medical school support in salaries and for making such salaries competitive with those of private practitioners so as to attract valuable members who would otherwise be lost. For the medical school to do this, the provision of funds must be based on careful and conservative spending in the area of buildings and capital improvements. It calls for the creation of funds which have been generated by clinical efforts to be shared mutually and equitably by teachers, basic scientists, and clinicians alike, whether or not such individuals directly contributed to the fund. It calls for the application of political and governmental pressure to recognize the need for public support and subsidy of teaching efforts. It calls for third party payments which subsidize bedside teaching. It calls for increased tuition as the cost of living increases. It calls for enhancement of private and foundation endowments earmarked for teaching purposes.

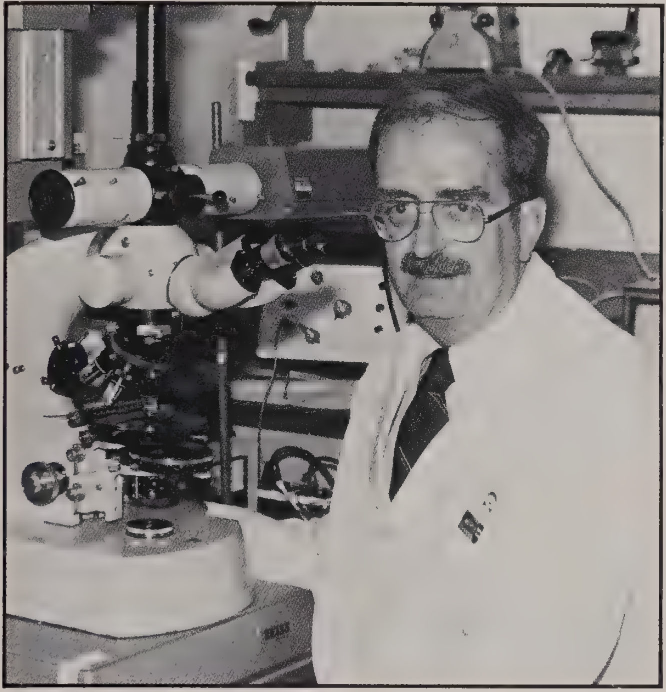
The curriculum should be well founded to provide a careful background in the basic and clinical sciences. The basic science courses should permit clinical correlations from the earliest time so as to relate the clinical and basic science areas. A curriculum should wed the basic and medical sciences into one. The interpretation of a patient's problems must be in a pathophysiologic terms with full understanding of anatomic, biochemical, genetic, and environmental factors. The curriculum must allow insights into the moral, ethical, and philosophical issues as they relate to a physician. It is vital to understand the moral and philosophical issues which daily confront a physician in applying a growing technology. It is important that a physician understands the Hippocratic Oath and his responsibility to practice each day of his professional life in the spirit of that Oath.

The most important responsibility of a medical student is the realization that the period of time spent as a student is finite, but that the need, responsibility, and self-motivation for continuing education each and every day of one's professional life is inherent and mandatory. Medical school is but the introductory chapter to a book which is written by our dedication to continuing education and to the fluent application at the bedside of sound scientific technology. The greatest lesson that the medical student must learn is that which we can not teach. It is to respect life. To treat people as we would like to be treated. It is to communicate, to be gentle, to be understanding, to be compassionate, and most of all, to be human. In the words of J.

Bronowski, "We have to cure ourselves of the itch for absolute knowledge and power. We have to close the distance between the push-button order and the human act. We have to touch people. Every judgment in science stands on the edge of error, and is personal."

It is essential as physicians and as scientists that we be aware that we are human. That we be aware that to err is human. That the greatest harm to our patients will be done by our dogma and our arrogance. We must avoid being gods. In the words of Oliver Cromwell as quoted by Bronowski, "I beseech you, in the bowels of Christ, think it possible you may be mistaken."

Steve Osofsky



Wendell F. Rosse, M.D.

I have been at Duke for all but six of the last twenty-two years, having come as an unformed medical graduate, and I have been molded by the experiences here. I have learned much and have formulated several precepts which have helped to guide me in patient care and in teaching. They are not all, or perhaps any, original but they are precepts which, when followed insofar as possible, have simplified my life.

Although the medical problems of patients can be wonderously complex, a few simple rules, if followed consistently, will assure that the patient and the doctor understand one another in the solution of those problems. The relationship between the doctor and the patient is in the form of a contract. The patient brings to the contract a request for improvement in his health; the doctor brings to it the promise to do the best he can to meet that request. It is useful to review the terms of the contract periodically to be sure that the expectations of the patient are not beyond the ability of the physician.

The contract is between the doctor and the patient; it is not between the doctor and anybody else, including family, employer, government and so on. The primary responsibility of the doctor is to the patient. If the patient is competent, no one but the patient can control the terms of the contract. The family must, however, always be given special consideration, particularly when the patient is dying or when he dies.

The contract implies that the doctor will do what is best for the patient, and so long as the precept is followed, the contract will be, for the most part, fulfilled. This means that when questions arise, the answer is to be found in doing what is best for the patient, rather than what is most convenient for the hospital or the doctor, or anyone, or anything else. Much of the skill of medicine comes from knowing what is best for the patient and much of the art of medicine from doing it well.

The patient does not bring to the contract the reciprocal guarantee that he will do everything the physician wants. He reserves the right to have the last word, and the physician must recognize this so that when that right is exercised, no rancor ensues. As a general rule, whenever anger enters into the clinical setting, the patient suffers. This is most noticeable when the anger arises between the doctor and the patient, but can also be seen when anger arises between the doctor and the nurse, the nurse and the patient, the doctor and the family and so on. Although it is not always possible to prevent anger from arising, it is possible to recognize it for what it is and to defuse it before the patient suffers.

The contract between the doctor and the patient implies honesty and trust on both sides. If the patient cannot trust the doctor, the contract is likely to become void. This means that the doctor cannot lie to the patient no matter how convenient it might be. Hard facts must be discussed as hard facts, but their hardness can be softened by sympathy.

The contract is between two people and the physician must always remember that the patient is, first of all, a person. His concerns, sensitivities, aspirations and condition in life must be taken into account in fulfilling the terms of the contract. It is sometimes easier for the young physician to view the patient as a bearer of disease rather than a person with a disease and, particularly when the patient is not fully competent, to dehumanize his being and to forget those things that make him a person. This is sometimes reflected in the terms by which patients are referred to; such terms should be avoided, but more important, the attitude which generated the terms should be eschewed.

I have seen Duke both as a learner and as a teacher, and I have enjoyed both roles, often simultaneously. Hippocrates, and all who have followed him, recognized the importance of teaching and learning, and university hospitals have been built up with that as their special objective. It is important to remember that students and other learners are the real reasons-for-being of a **university** hospital; patient care can probably be equally well accomplished in other settings. This gives particular importance to students of all capacities in such a hospital.

Dr. Stead always maintained that more is learned when people are having fun in learning, and this is particularly true in medicine. Even though the work may be hard and the hours long, if the work is enjoyable and remunerative in non-monetary ways, people will gladly put up with the inconveniences. Learning medicine and practicing medicine should be so enjoyable that it is hard to distinguish between work and fun.

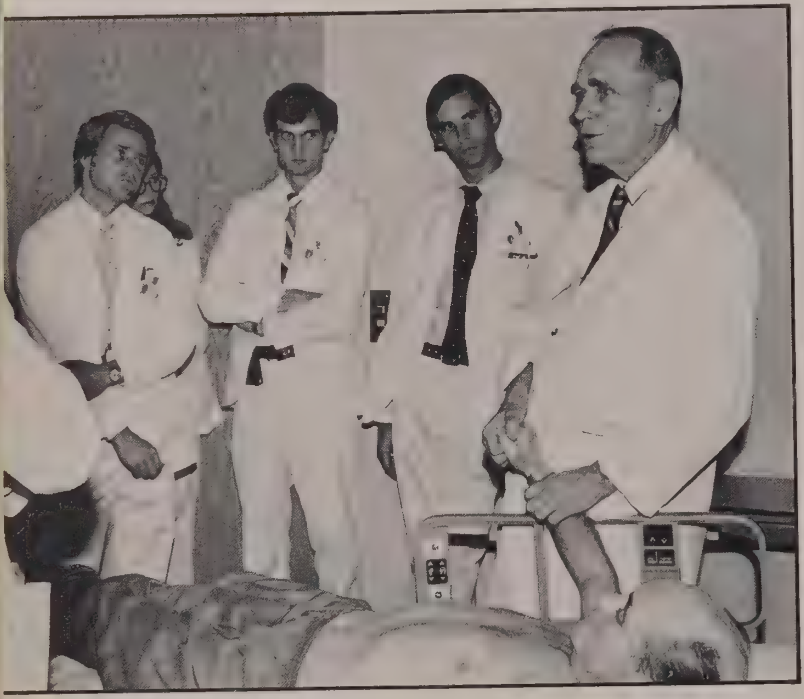
One of the joys of being around the university hospital is watching young people turn into physicians. The processes of acquiring knowledge and remembering it are complex, but in general, students remember a patient with a disease more readily than they remember a disease without a patient. This is the reason for involving patients in the learning process, and patients coming to a university hospital should expect to be involved in this way.

One of the most important but most neglected parts of the learning process is learning what a patient's history is. It is often said that the patient is a poor historian; this is always an incorrect statement because the physician is the historian. An historian is one who assembles facts derived from the past from a number of sources to form a composite and an integrated view of the past. The role of the patient in the formulation of his history is obviously great. However, it is the role of the physician-historian to gather facts from all sources and to assemble the facts derived, both from the patient and other sources, into a coherent history.

Considerable effort is made to learn medicine in the context of science for several reasons. In the first place, without the continual renewal from the scientific process, we would become complacent with our knowledge, and progress in our understanding of patients and their problems would not be made. More important, however, is the fact that there is no difference between the logic used to solve clinical problems and that used to solve scientific problems. Since that logic is best learned in a research setting, the university hospital with a scientific background makes a good setting to learn it. Man is now endowed *a priori* with a logical mind and logic must be learned. Scientific logic is that which has been shown pragmatically to be the most consistently correct, and the methodology of scientific logic learned in the laboratory can be applied to the solution of problems of patients.

This short space is not sufficient to expound fully a philosophy of medical care or medical education, and yet it is sufficient to set out a few observations which I have found useful in guiding me in taking care of patients and being part of the educational process at Duke.

Wendell F. Rosse



Eugene A. Stead, Jr., M.D.

GUIDELINES FOR A HAPPY AND REWARDING LIFE

Many young men have come to me for advice about their professional careers. I have been impressed with the fact that they rarely ask what I think is the most important question: How can I achieve happiness in my life? There is no magic answer, but there are some general guidelines. I would like to share them with you.

Remember that each person is unique. Define the activities that give you the greatest satisfaction. All forms of work are equally honorable but not all create equal satisfactions for a particular person. Medicine is a demanding mistress. Most doctors who really enjoy their professional life make little distinction between work and play. Both require you to be awake and to score points. You will have the most fun when you have selected work games and play games at which you excel. The field of medicine is broad enough so that you can find your proper niche.

The years immediately after medical school are the freest you will ever have. Spend them in a way in which each year repays you in terms of satisfaction, achievement, and personal growth. Do not worry about whether each year presents progress towards some elusive career goal. Collect payment for each year in full as you go.

Select a mate who has joy in living and work towards the goal of romantic love. Mutual respect and admiration are the essential elements for a long-time relationship. Fun in bed can usually be achieved if the couple means for the marriage to succeed and if the bonds of respect are high. When a couple marries, the idea of true romantic love is an illusion. The notion that you have found the only one in the world who can give you joy cannot be defended. After 40 years of successful marriage, when each member of the pair has been slowly molded to fit the other, romantic love becomes a possibility. Evelyn and I are now molded by each other to the point where no other persons can equally well fit our individual needs and personalities. We are now uniquely suited to each other and romantic love is a reality.

Children can add to the joy of the day. Don't have them until you are willing to give something of yourself each day to them. Keep the accounts current, and close the books each day at midnight. You have had your fun and they owe you nothing.

Don't become a complete materialist. There are other satisfactions than things. Always live below your income. Have the bills paid before Santa Claus comes.

Arrange your free time in a way so that all the family can enjoy each other. Building a house together has given parents and children in our family a common interest and mutual respect. I am pleased that, in spite of my having lived a full and busy professional life, none of my children have felt neglected by their father. When your children grow up, respect their individuality, accept their differences, and do not require them to be like yourself or like each other.

Become a student of human behavior. Learn that behavior is determined by the structure of each individual brain. Some elements of the brain are reversible but most are not. Knowing that brains limit behavior leads to true tolerance of one's fellowman. Establish high requirements for those born with the most flexible brians. Do not make sadistic demands on those who cannot achieve the highest levels of performance. Appreciate the fact that selection is more important than education. Arrange to accentuate the best qualities of those you have selected and minimize their weaknesses.

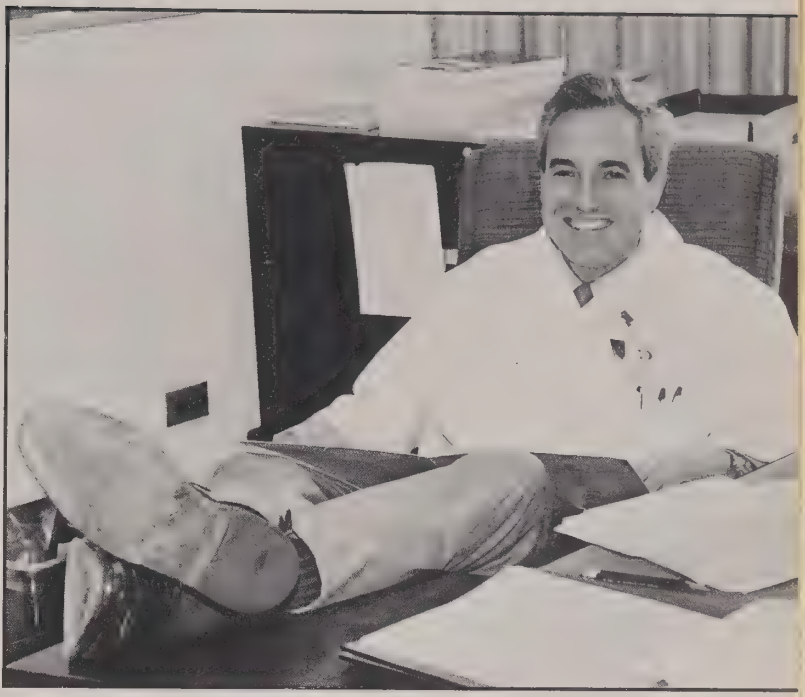
Accept the reality that happiness is finite rather than infinite. When happiness has reached a reasonable level, stop and enjoy it. If you make the error of thinking that happiness is infinite, you will chase "the little man who is not there" and miss the enjoyment of the present. This knowledge can allow you to be the Peter Principle and prevent you from being promoted to your level of incompetence.

Your life is your own. Live it.

Eugene A. Stead, Jr.

MEDICINE AND MEDICAL EDUCATION: A STATEMENT OF PHILOSOPHY

H. Keith H. Brodie, M.D.



A philosophy of medicine is really a philosophy of diagnosis, treatment, and the prevention of disease. My philosophy of diagnosis and treatment relates principally to the risk-benefit ratio associated with various diagnostic procedures and treatments available in modern medicine. In the past these ratios were developed, at times unconsciously, by physicians who rarely had to defend them. Diagnostic and therapeutic procedures were instituted without challenge. The results were usually positive, but there were some abuses. Today, in an era of second opinions, an informed public, and reimbursement policies relying heavily on peer review, the physician must make choices based on a risk-benefit analysis and justify them to the patient and to peer reviewers. This process of justification has created a new philosophy of full disclosure to patients and their relatives. It has demystified the practice of medicine to the point of assigning to some patients the role of co-therapist.

Interest in patient advocacy, patients' rights, and holistic health care in the least restrictive setting has heightened the importance of patient awareness concerning the risk-benefit ratio. The physician is aided in the treatment process by an informed patient who is enthusiastic about the treatment selected and is committed to making it work. Research on positive attitudes associated with the placebo effect underscores the importance of this factor in maximizing the efficacy of any treatment. The current trend in patient consumerism may be harnessed in the service of good treatment outcome through increased patient compliance and interest in changing those lifestyles associated with increased risk of disease.

A philosophy of prevention involves an awareness of factors predisposing to disease and a willingness to work with a patient or with a community in the service of preventing disease through changes in public health and private lifestyle. Public health measures have had profound impact on decreasing the incidence of infectious disease. Recently, clinician interest in changing private lifestyle and behaviors associated with risk of illness has increased. It is of note that five of the six leading causes of death are lifestyle related. To change patient lifestyle, the physician must be informed concerning the risks of improper diet, cigarette smoking, a sedentary lifestyle, and abuse of alcohol to name only a few. The physician must understand those factors underlying behavioral health risks. For example, a patient self-medicating a severe loss with alcohol should be treated for depression. The physician must gain familiarity with the new technology of behavior change in order to refer patients for smoking cessation therapy or for help in complying with a particular medical regimen. Thus, for the Eighties at least, a philosophy of medicine must focus on the patients' capacity to serve as co-therapist in the treatment of disease and as the principle agent of change in disease prevention.

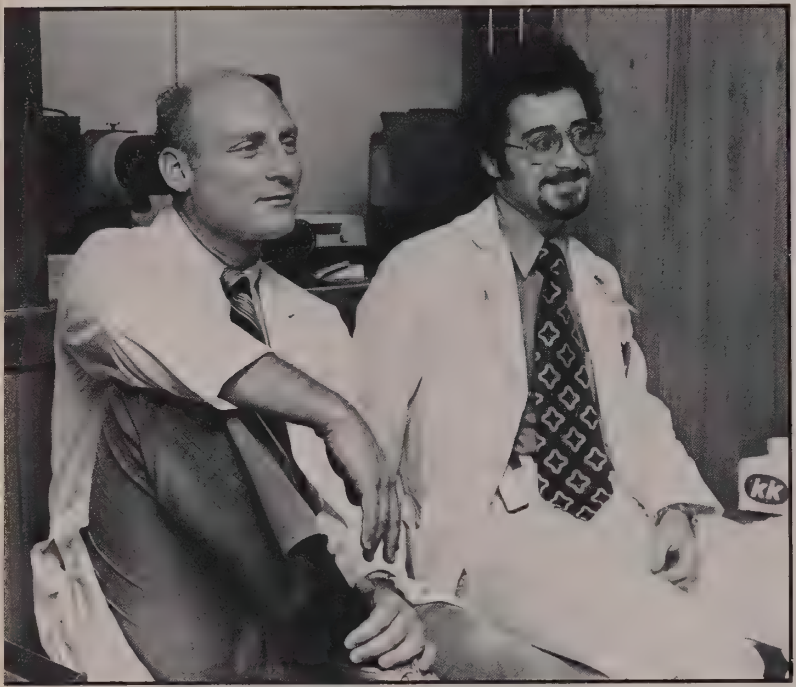
The purpose of medical education at Duke is to produce physicians of exceptional merit. Such physicians should have the knowledge and skills necessary for excellent patient care. But above that, these physicians should have a positive attitude toward addressing current and future societal needs. A medical education involves three principle ingredients — knowledge, skills, and attitudes.

Knowledge is gained through lectures, laboratory demonstrations, training, and the reading of medical texts. It is assessed principally through examination, and unless it is reinforced through recall, it may all too soon vanish from memory. Skills are taught in the laboratory, principally at the bedside, and are continually reinforced through clinical practice in the later years. Assessment of skills is usually carried out through direct observation. Attitudes are developed through observational learning. Rarely are they taught in a formal sense, but rather the medical student is exposed to attitudinal role models in housestaff and faculty. Of the three educational components, attitudinal change may be the most difficult to accomplish in a medical education. Many argue that the attitudes of humane concern, empathy, altruism, and the ability to support at a time of crisis are difficult if not impossible to impart to a student. They would hope that the admissions process admits only those students who already possess these attitudes. Yet to select students on this basis is extremely difficult, and at present a good medical education must include attitudinal development.

Somehow the process of medical education must, if it is to be effective, transfer various attitudinal templates to the medical school graduate. These should include a desire for continuing medical education, an insatiable curiosity to go beyond the limits of current knowledge, to wonder why, and to challenge current theory. In addition, the student should be equipped to work effectively and harmoniously with all members of the health care team given the emergence of numerous allied health professionals to whom have been delegated many responsibilities heretofore assigned the physician. Finally, the student's interest in prevention should be heightened to the point of self-scrutiny with regard to emotional well-being and to behavioral factors such as smoking, excessive alcohol intake, and dietary indiscretions. The physicians must be sensitive to these factors as they facilitate the development of disease, and be able to effect behavioral change in patients through example and through intervention.

In summary, knowledge will continue to expand. History taking and physical examination will continue to be important; however, new techniques will require the development of new skills. Medical ethics, death and dying, human values, medical humanities, and patient compliance will be regulars in the new curriculum. Through increased self-awareness which exposure to these topics will bring, the physician should be better equipped to prevent disease and to help the patient cope with those diseases for which there is no cure.

Keith Brodie



Harvey J. Cohen, M.D.

I was quite honored, but somewhat shocked, to be asked to write for a philosophy section on medical education and medicine. I have not thought of myself as a philosopher, but as a rather pragmatic and practical person. I recently defined philosophy as a talk without slides, and since this is a paper without date perhaps it qualifies. At any rate, this might be viewed as my practical philosophy on medical education and medicine.

You in the graduating class are about to embark on a career in medicine for whch you have worked extremely hard and during which you will presumably continue to do so. We all have made a tremendous investment in our futures, and yet, distressingly, many prove ultimately to be unhappy. This is attested to by the extremely high incidence of divorce, suicide, alcoholism, and drug abuse among physicians. I presume that a number of factors along the road of the educational process influence this and should be kept in mind if one is to avoid the pitfalls which so often seem to beset members of our profession.

First, students come to the beginning of the medical education process with little concept of what is about to happen. At Duke the student starts in a year that has reasonably defined limits and goals, though one may well be awed by the magnitude of the body of the information to be covered. In the second year the student discovers that there are few limits and specific goals as the realities of medicine with its infinite source of material and information strikes home. The student now begins to suffer from feelings of inadequacy. Thus, the third and fourth years often see a mad scramble to "fill in the gaps", as if by simply taking a course in every area there will be no leaks. How foolish this is. Just observe the "all-knowing" intern near the end of the first post-graduate year, and then watch him as he feels inadequate the following year when faced with the responsibility of having a major voice in determining the medical care for 35 people; then one knows that at every stage of medicine there are those who know more about something than you do. Then finally, for those chosen few who seem to know all, there is the even greater void of the still unknown. I believe that the sooner in one's medical education one comes to grips with this reality the better. Medicine is infinite, and there is always more to learn and much left unlearned. We must be comfortable with this seemingly endless inadequacy while always sensibly striving to know as much as we can. To exist comfortably in that setting in medicine is one of the greater challenges for us all.

Where do "educators" fit into this scheme, or, "Why am I here?" Everyone of us, often simultaneously, is an educator and a learner. It is clear to me that I have most often been much more the learner, especially during the last few years. I have often thought it pretty sneaky to leave the illusion that one has been teaching, while all along one has been learning from the learners. That has been my — and I suspect most teachers' — great delight in being involved with medical education, i.e., being able to spend such a great amount of time with so many bright, enthusiastic, and eager students and housestaff and to learn from them. There have been times on rounds when I have wondered if the wrong people were paying tuition. Perhaps, however, that is the role of the "teacher" in the clinical setting: to allow oneself to be taught by the learners so that they may learn as they teach. I used to think that teachers were supposed to answer questions; I now realize that they are to ask them. In an often misunderstood statement, it has been said that at Duke teaching is not what people are paid for. At first this sounds like an anathema to the education process. The point is, however, that one paid only to teach and not to develop and advance his skills as a clinician or investigator soon may be a teacher with nothing to teach, an expert in process but not in knowledge. I believe that to remain an effective teacher one must continue to be excited by the clinical and/or investigational aspects of our profession and to communicate this excitement to students. There is a parallel for the practicing physician; one must be wary that by training and practice one does not become so rooted in process that one becomes a physician for today but not tomorrow. Flexibility, a continued quest for new knowledge, and preservation of the excitement of discovery are essential for assuring competence for the future.

It has often been said that in striving to acquire the knowledge of which I have spoken, medical students, and subsequently physicians, lose their humanity and compassion. It often seems portrayed that high level medical care is incompatible with compassionate care. I believe both are highly worthwhile goals, but clearly not mutually exclusive. It is always a mystery to me why people assume that the most highly trained, highly skilled, super subspecialized physician cannot be equally humane and compassionate. Personally, I think we should be insulted by the implication. It is not a question of medical training, but of maintaining some basic human attributes. The most highly specialized clinician can still speak softly and gently to patients, be willing to listen to them, touch them, sit with them, and even grieve with them. This is not a substitute for knowledge and skill but a companion to it. It takes only an awareness of our own humanity and mortality.

How then do we cope? I would stress keeping things in perspective. Maintain a sense of humor. Don't take yourself too seriously. Remember that no one is indispensible, that things have a way of getting done, that life goes on regardless, and that almost no individual is so unique that he/she cannot be replaced. There are obviously serious aspects to our profession, but laughter should not be excluded. To do so is to take the fun out of life, and life is too short not to enjoy it while we are here. Of course, enjoyment is an individual thing. I enjoy a good basketball game, some others a good symphonic performance. Is one "better" than the other? I think not. Outside approval of what you enjoy matters little — it is your life, not theirs. This applies to the time spent professionally as well as nonprofessionally. Not too long ago I read a most disheartening account of graduating medical students decrying their four years of medical school and anticipating unhappiness in the medical aspects of their future lives, with the only redeeming feature seen as the time away from medicine. Non-professional time is clearly vital, but I fervently hope that most of you look forward to your professional careers with excitement for the promise of a stimulating, enjoyable, and productive time. Otherwise we truly have failed as educators. To the graduating class my final wish: persevere and enjoy.

Harvey Cohen

Bernard F. Fetter, M.D.

TEACHING

I have been asked to write a few lines about teaching. This subject is broad and quite complex. What is teaching? Most people think in terms of the transference of knowledge from instructor to student. For this to occur there are two essential ingredients: first, a knowledgeable instructor who wants to transmit information, and secondly, a receptive student who wants to receive information. The acquisition of data does not need an instructor, since a book may act as source material. Few instructors like to think that they can be replaced by a book.

A better concept of teaching may be derived from a definition in *Websters New Collegiate Dictionary,* 1977: 'to accustom to some action, as, **accustom students to think for themselves.**' Such a definition connotes bilateral activity and is the real basis of education. If all one wants to hear, as an instructor, is a recitation of what one has already said, he should speak into a tape recorder so that it could be played back flawlessly with proper inflection and word usage at any time. It is essential that the student learn to think and to acquire, to assimilate, to utilize, and dispense knowledge.

What are the prerequisites in teaching? If teaching is to come about, obviously one must have a teacher. But who is the teacher? We have become habituated to considering the teacher as one who is a member of the faculty of an institution. As one gets older and more experienced, he realizes that everyone with whom he comes in contact is a teacher of some sort. The medical students will have as their teachers the faculty, the house staff, fellow students, technicians, service personnel, administrators and last, but by no means least, the patient. If they wish to be truly educated, they will take advantage of all these opportunities.

The second prerequisite for teaching is medical students. Who are the medical students? They are individuals who have been exposed to a standard system of education from grade school through high school and college. The system is one in which the students are told many things and then told to study them carefully since they will be tested on the subject matter. They dutifully study, pass the examination, and promptly forget the subject matter. What is retained and available for instant recall is that which is used everyday. The students are like sponges — able to acquire enormous amounts of data and then, as the sponge, expel it and get ready to acquire more. The prime objective of the medical students should be different from that of the undergraduate. The latter takes courses as prerequisites and looks upon them as obstacles to be passed on the way to his goal. The medical students should look upon their education as the beginning of a new way of life — a life of continuing acquisition of knowledge. Medical school is therefore neither an obstacle nor an end. Any student who considers medical school an extension of previous education is not properly oriented. The information acquired in medical school is the foundation on which the future practice of medicine will be built.

By what techniques is knowledge imparted? The obvious answer given by most people would probably be the lecture. By this technique, one person is able to transmit information to an unlimited number of people. Unfortunately the students listening to the lecture rarely comprehend anything they hear because they are too busy writing. They try to transcribe what is said verbatim, so that when the test comes, they will be able to respond with acceptable terminology. Someone years ago described the lecture as the transfer of words from the notes of the instructor to the notebook of the student without passing through the brain of either. New information is better transmitted in written form when it can be read and reread at one's leisure. However, demonstrations of illustrative material or technique are quite satisfactorily presented. With available electronic gadgetry the number of persons who could attend a lecture is limitless. Such techniques allow for a small faculty participation in contrast to the number of students.

The use of small groups is more expensive as far as faculty is concerned but enables closer contact with the students. In a small group the students should be encouraged to participate, as this represents the most important aspect of education as mentioned above. The students must be made to think for themselves. It is the ability to think which separates man from the computer. The students should be challenged to determine if they are simply quoting information which they have read or have actually assimilated the data and made it a part of their fund of knowledge. The knowledge the students acquire must be used repeatedly, since only knowledge which is used is retained; that which is not used is easily forgotten. If the students are not challenged from day to day, but only on monthly or bimonthly tests, they soon learn to study monthly or bimonthly.

A final teaching technique is that of the preceptorship with the student and instructor on a one-to-one relationship. This is the ideal which is not too often attainable. The instructor is not only able to encourage the acquisition of knowledge but is able to impart wisdom by example.

I think the educated medical students are those who can accumulate facts by virtue of their own efforts, who can think for themselves, and who know in which books to find additional information.

Bernard Fetter

FACES FROM THE PAST

This section recognizes fifteen former professors who stand out in the history of the Duke University School of Medicine as distinguished educators, administrators, and researchers. The Duke University School of Medicine stands in its fiftieth year as one of the most outstanding medical institutions in this nation largely because of the untiring dedication of professors such as these to excellence in medical education.

I would like to thank Dr. James Gifford for his assistance in the selection of the people to be featured in this section. I would also like to thank Dave Harlan, Pete DeLuca, and Phil Buscher for contributing bibliographies.

F.I.B.

3

FACES FROM THE PAST

Wilbert Cornell Davison 37

Eugene Anson Stead, Jr. 38

Barnes Woodhall 39

David Tillerson Smith 40

Julian Deryl Hart 41

Philip Handler 42

Jay Morris Arena 43

George Baylin 44

Jasper Lamar Callaway 45

Talmage Lee Peele 46

Thomas DeArman Kinney 47

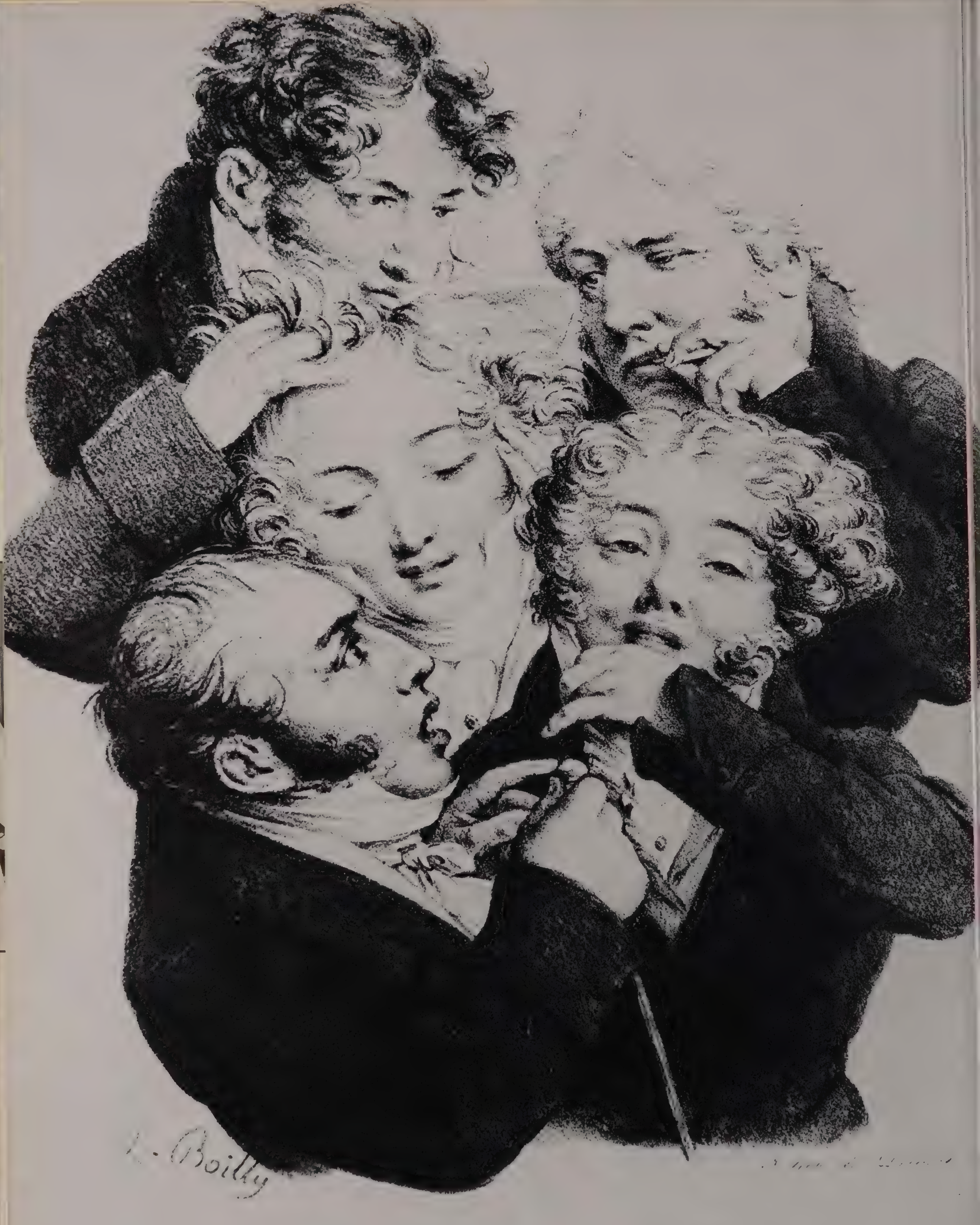
Francis Bayard Carter 48

Wiley Davis Forbus 49

Francis Huntington Swett 50

Norman Francis Conant 51

Section Editor
Febe I. Brazeal



Consultation de Médecins.

Wilburt Cornell Davison

"You have been elected. Delighted with the prospect of working with you." — *W.P. Few*

"Delighted with honor. Wish to express to you my great appreciation." — *W.C. Davison*

It was this exchange of telegrams in January, 1927, which doubled as a contract, that marked the beginning of Wilburt Cornell Davison's thirty-three year career as Dean of what was then merely the idean of Duke Medical School. He would spend his future applying past experiences in shaping this idea into the reality of medical, academic, and humanistic excellence.

Wilburt Davison was born April 28, 1892, in Grand Rapids, Michigan. As the son of a Methodist minister, he spent most of his youth moving from town to town across Long Island, New York. His father stressed a strong academic discipline, which was rewarded in 1913 when, as a Phi Beta Kappa Princeton graduate, Davison won a Rhodes Scholarship for study at Oxford.

Armed with a Johns Hopkins medical catalogue, the young student constructed his own one year program to complete the first two years of medical school. He boldly approached Sir William Osler and secured permission for what the Medical Dean called a "foolish request." Osler then introduced Davison to his wife as "a new American colt, who is wrecking a medical school tradition." So began the deep friendship between Wilburt Davison and Sir William Osler.

Osler's influence, combined with Davison's untiring persistence, allowed the student to achieve a well rounded medical education at the University of Edinburgh, Guy's Hospital, and the Rotunda Hospital in Dublin. His experience in Europe also included working in French Army hospitals where he treated wounded soldiers and typhus victims during the early part of World War I.

Davison left England in 1916 having achieved a B.A., B.Sc., and credit for three years medical training, yet he returned to the United States with far more. His four year association with Sir William Osler had instilled in him the ideals and priorities of medical education which would eventually become Duke Medical School.

Davison's fourth year of medical school was completed at the Johns Hopkins, and, under the influence of the "benign dictator," John Howland, he entered the field of pediatrics. With the United States entering into World War I, he again served — this time in charge of war orphanages and hospital laboratories in England. From his return home in 1919, until 1927, Dr. Davison served at the Johns Hopkins, teaching clinical pediatrics and laboratory medicine, and eventually becoming Assistant Dean.

In 1927, at the age of thirty-five, Dr. Davison was called to his "Dukedom." His goals were specified as rapid achievement of "recognizable medical excellence," and cooperation with the Duke Endowment in serving the health needs of the Carolina communities. The three non-stop years he spent in laying the groundwork for the new hospital themselves comprise a saga.

The Dean worked not from behind a desk in Durham, but acively took to the road. He traveled through eastern cities to study other hospital layouts, and feverishly he recruited a new young faculty, described as "a most complete colony" from the Johns Hopkins Medical School.

Following the hospital's opening, on July 30, 1930, Dr. Davison once again had time to concentrate on being physician, educator, author, and Dean. All of this he pursued in a dynamic application of Osler's "humanist-physician" tradition. He describes his role of Dean as "an adjunct to the faculty, not the commanding officer." In administrative matters he was known to remain fair and objective, regardless of his personal feelings. Perhaps his famous wit and sense of humor served to soften his obvious authority. Whenever possible, he avoided formality and written rules and conducted both his administrative duties and ward rounds in shirt sleeves and without a tie.

For his students, some two thousand graduates, his teaching echoed loudly of Sir William Osler and John Howland. He emphasized the need for a solid fund of medical facts. This was complemented by self-education, individual research, and especially the development of independent study habits to assure keeping up with the expanding medical literature.

Dr. Davison's tremendous energy saw fruition in many other areas of health care. He established training programs for medical technicians and dieticians and made available combined Nursing and B.S. degrees. The Dean believed in and provided for the training of non-medical personnel for hospital administrative positions. As did Osler, Davison considered books invaluable in the study of disease, and he supported medical libraries nationwide. Sensitive to the problems of financing medical care, he was a pioneer in the area of prepayment plans and contributed greatly to the establishment of the National Blue Cross program.

Equally important are Dr. Davison's contributions to medical literature. He was the author of well over two thousand papers in addition to writing eight editions of *The Compleat Pediatrician.* The Dean was especially proud of this collection of often forgotten facts and methods. He was excited when told that his book was the sole medical source available at the surrender of Bataan and that it was used to determine the dietary requirements of thirteen thousand American prisoners at Cabanatuan.

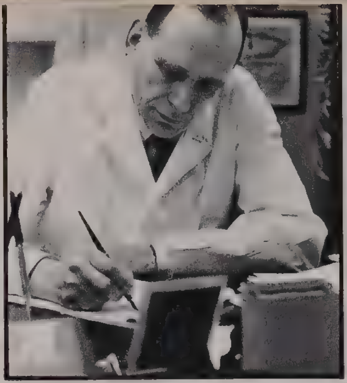
Dr. Davison continually revised *The Compleat Pediatrician* "in otherwise idle minutes on trains, steamers, and planes, in bars on ships and at airports, and at lectures, concerts, and medical meetings." His book always accompanied him on his numerous journeys as part of his "traveling bag." The known contents of this infamous bag comprise a mandatory list to be included in any biography of the colorful Dean:

1 flask of brandy
1 flask of bourbon
1 flask of scotch
1 copy of *Reader's Digest*
1 copy of "Omnibook"
1 cheese sandwich
1 thermos of coffee
1 bag of peanuts
1 deflated rubber sitting ring
1 steel container with aspirin, cascara, secobarbital,
  caffeine, sulfa, and antihistamine drugs
The Compleat Pediatrician in revision
1 cellophane bag of chocolates and varied candies
1 eye shade and several sets of ear plugs

Dr. Davison's 1961 retirement marked the end of a great phase in Duke Medical School history, but not the end of his contributions to medicine. With his physician-wife, Atala, he moved to a five-room cottage in Roaring Gap, N.C., where he continued to see patients. He also actively carried on his travels, which he always held dear and attended medical meetings throughout the east.

Dr. Davison continued in his service to Duke Medical Center and medicine universally, until his death on June 26, 1972. In its fiftieth year, our Medical Center stands as a tribute to the life of Wilburt Cornell Davison.

Pete DeLuca



Eugene Anson Stead, Jr.

> "What does he show that alerts people to his special presence? This probably has different answers for different pupils. For many of us, the most attractive and compelling intellectual feature of Dr. Stead has always been his tremendous ability to analyze a complicated problem, reduce it to essentials, and express it with clarity. When one puts this ability together with a strong and determined character, a gift for colorful statement, and the other traits I have already mentioned, then the picture does begin to emerge of a teacher, a service chief, a senior research partner, and an administrator who commanded deep respect and whose good opinion was earnestly desired."
>
> —John B. Hickam, "Eugene Anson Stead, Jr.: An Appreciation." Annals of Internal Medicine 69: 994, 1968.

Eugene Anson Stead, Jr., was born in Atlanta, Georgia on October 6, 1908. He received his B.S. degree in 1928 and his M.D. in 1932 from Emory University. He spent the first years of his illustrious medical career as an Intern in Medicine at Peter Bent Brigham Hospital (1932-33), a Research Fellow in Medicine at Harvard (1933-34), an Intern in Surgery at Peter Bent Brigham (1934-35), and an Assistant Resident and Resident in Medicine at Cincinnati General Hospital (1935-37). From 1937 to 1939, he was as Assistant in Medicine at Harvard. He then spent two years as an Instructor in Medicine at Peter Bent Brigham. He returned to Harvard as an Associate in Medicine for one year, and in 1942, he returned to his medical school Alma Mater, Emory University, as Professor and Chairman of the Department of Medicine.

Dr. Stead came to Duke University in 1947 as Professor of Medicine and Chairman of the Department of Medicine. Duke medical students, house staff, and faculty members will undoubtedly remember him for his teaching prowress and the indelible impression he made on medical education at Duke. Dr. Stead designed his career at Duke around teaching all levels of learners, from medical students to senior staff. For the twenty years that he was Chairman of the Department of Medicine, he rounded on Osler Ward three days a week, eleven months of the year. He insisted on a system of ward rounds in which the student presented the patient, the intern answered all the questions that the student could not, and finally, the resident answered questions that the intern could not. For Dr. Stead, there was no hierarchy on rounds. Dr. Stead also led a physical diagnosis group of five or six second-year students each spring.

In the eyes of Dr. Stead, the focus of teaching medicine was the patient. Every patient, no matter how mundane the complaint, was an interesting patient. If a house officer should mention to Dr. Stead on the way to the bedside that this patient was not particularly interesting, that subsequently embarrased house officer would spend an hour or more at the bedside while Dr. Stead made many interesting observations about the patient's medical and personal life and asked many questions which the house officer had neither thought of nor was able to answer.

As far as house officers were concerned, Dr. Stead firmly believed that there was only one place and one way to learn medicine, and that was to be in the hospital. This belief that medicine could only be learned by adminstering to the sick led to the development of the famous (or infamous, depending on your point of view) five nights on call out of seven. Other unique features of the house staff program during the Stead years were morning report six days a week where the chief resident and the two residents from the private service talked about anything they wanted to talk about, "Sunday school," which was an hour-long presentation by a house officer on any medical topic of his choice at 9:30 a.m. each Sunday, and the opportunity for the chief residents to spend three hours a week with Dr. Bingham Dai, a clinical psychologist.

For many years, Dr. Stead read all manuscripts going out from the Department. He made a point of dropping in on Division Chiefs, labs, and wards; this produced the feeling that Dr. Stead was always around the corner and that you might be called upon to explain your actions at any time.

The Physician's Assistant Program was pioneered by Dr. Stead and is further evidence of his innovations in education. The successful development of the PA program was the extension of Dr. Stead's fundamental belief that medicine was a practical science and that there was no hierarchy of knowledge so long as one learned to define what he did and did not know.

Dr. Stead's research endeavors were centered around the cardiovascular system. He was particularly interested in shock and the influence of anemia on circulatory dynamics. Along with James V. Warren, he explored the use of the catheter in sampling blood from pulmonary arteries, hepatic veins, and renal veins. He was also the first to make use of the technique of cardiac catherization as an aid in the diagnosis of congenital heart disease.

After retiring from the position of Chairman of the Department of Medicine in 1967, Dr. Stead served for one year as a consultant for medical affairs for the Commonwealth Foundation in New York City. He then returned to Duke where he continued to provide considerable student and faculty guidance. He served as attending physician three afternoons a week at the Methodist Home and developed a new career in the field of medical information in the application of the computer to medicine.

For his many contributions to clinical and academic medicine, Dr. Stead has received many honors and awards. He was the recipient of the Distinguished Teacher Award from the American College of Physicians in 1969, the Robert H. Williams Award from the Association of Professors of Medicine in 1970, the James B. Herrick Award from the American Heart Association in 1970, the Abraham Flexner Award for Distinguished Service to Medical Education from the Association of American Medical Colleges in 1970, and a Citation for Distinguished Service to Research from the American Heart Association — to name only a few. He also received the Distinguished Teaching Award from the Duke Medical Alumni Association in 1974 and was honored by the Georgia Heart Association in 1976 with the Eugene A. Stead, Jr., Symposium.

Dr. Stead has given the medical community many pearls of wisdom known affectionately as "Steadisms." No characterization of Dr. Stead would be complete without a few of them:

> "I don't feel sorry for the doctor; the sick never inconvenience the well."
> "Take care of people, not illnesses."
> "What you're telling me is that life is hard. What I really want to know is what the patient's spinal fluid shows."
> "Learning is an active process and each of us learns more when we teach than we we are taught."
> "One learns by asking one's self questions then going out and finding the answers."
> "I think this patient is trying to tell us something."
> "What this patient needs is a doctor."

Febe Brazeal

Barnes Woodhall

Barnes Woodhall was born in Rockport, Maine, on January 22, 1905. He received his early education at a number of schools in New England and New Jersey; his father was one of the original executives of the Boys' Clubs of America, and his family moved quite frequently. His college years were spent at Williams College in Williamstown, Massachusetts. At first, he planned on a career as a stockbroker, but his interests were diverted toward medicine by a stimulating biology professor. After receiving an A.B. degree from Williams College in 1926, he entred the Johns Hopkins University School of Medicine. In 1930, he obtained his M.D. degree.

Dr. Woodhall spent the next seven years as an intern, resident, and instructor in surgery. As a medical student, he had participated in ophthalmology research and had originally intended on pursuing a career in ophthalmology. However, his interests were again diverted. After several rotations on the "Brain Team" of Dr. Walter Dandy, Dr. Woodhall decided to specialize in neurosurgery.

As early as 1934, the budget of the Duke University School of Medicine's Department of Surgery had contained a salary for a neurosurgeon. Dr. Deryl Hart was in no hurry to use this money because his aim was to find not just an excellent neurosurgeon, but one who "had the potential to become the best in the country." The surgeon that Dr. Hart felt filled this requirement was Dr. Barnes Woodhall, and on September 1, 1937, Dr. Woodhall came to Duke as an Assistant Professor in Surgery with the responsibility for organizing the Neurosurgical Division of the Department of Surgery.

Dr. Woodhall's career at Duke was interrupted by World War II when he joined the Army Medical Corps in 1942. After a short period of duty at the Ashford General Hospital in West Virginia, he became the Chief of Neurosurgery at the Walter Reed General Hospital in Washington, D.C. Lt. Col. Woodhall accumulated a great deal of experience in treating peripheral nerve injuries and co-authored a study of the peripheral nerve injuries sustained by American soldiers. For his outstanding work in this field, he was awarded the Legion of Merit in 1946. Later, while serving as a consultant to the Surgeon General and to the Veterans Administration, he co-edited and contributed to a two-volume history of neurosurgery in the U.S. Army during World War II.

Upon returning to Duke in 1946, Dr. Woodhall became Professor and Chairman of the Division of Neurosurgery. His research interests centered around a number of basic neurosurgical problems such as peripheral nerve surgery, the use of hypothermia in the surgical correction of large vascular anomalies, aneurysms and subarachnoid hemorrhages, and local perfusions of chemotherapeutic agents in neoplasms.

Dr. Woodhall sought to advance neurosurgery on a national and international basis and effectively did this by accepting a number of editorial and organizational positions. He became a member of the Editorial Board of the **Journal of Neurosurgery** in 1953 and served as its Chairman in 1961 and 1962. From 1962 to the present time, he has served on its Advisory Board. The **American Lectures in Neurosurgery** series of monographs has also been edited by Dr. Woodhall for many years.

Dr. Woodhall served as President of the American Academy of Neurological Surgeons in 1946, the Southern Neurosurgical Society in 1954, the Harvey Cushing Society in 1963-64, and the Society of Neurological Surgeons in 1964-65. He also was a member of the Executive Council of the World Federation of Neurosurgical Societies in 1960 and was Treasurer of the Second International Congress of Neurological Surgery in Copenhagen. Between 1960 and 1970, he served as an advisor and consultant to a number of medical groups including the Health Planning Council for Central North Carolina, the National Institutes of Health, the Veterans Administration, and the American Cancer Society. From 1964 to 1968, Dr. Woodhall was a member and then Chairman of the Board of Regents of the National Library of Medicine.

In 1960, Dr. Woodhall relinquished his position as Chairman of the Division of Neurosurgery to become Dean of the Duke University School of Medicine, succeeding Dr. Davison. While still Dean, he became Assistant Provost and the Vice Provost of Duke University. In 1963, he stepped down from the position of Dean. He assumed the position of Associate Provost for the Medical Center in 1967; in this capacity, he supervised the entire Medical Center with the Deans of the Medical School and Nursing School and the Director of the Hospital reporting to him, while he reported directly to the President of the University. He retired as Associate Provost in 1968, but continued to serve in an advisory capacity to the President until 1969, when he was appointed Chancellor pro tem of the University with responsibility for its internal affairs. In March 1969, the President of the University resigned, and a committee consisting of Dr. Woodhall, the Provost, and the Vice President for Business Affairs was given the task of running the University until a new President could take office.

Many laurels have been bestowed upon Dr. Woodhall in recognition of his outstanding leadership and academic abilities. He has been named a James B. Duke Professor of Neurosurgery, he has been elected a Charter Member of the Society of Scholars at Johns Hopkins University, and he has been given an honorary Doctor of Science degree by Williams College. The building containing the main entrance to Duke Hospital South was dedicated in his name, and in 1972, the Odom-Woodhall Legion was formed by former Duke neurosurgical residents to honor Drs. Woodhall and Guy Odom. In 1965, the book **Neurosurgical Classics** was dedicated to Dr. Woodhall. He was one of six distinguished neurosurgeons from around the world who selected to give special lectures at the Fourth International Congress of Neurological Surgery in 1969. In 1970, he was the Honored Guest at the Annual Meeting of the Congress of Neurological Surgeons. And the list goes on.

Today, Dr. Woodhall has officially retired from all of his positions at Duke, but he continues to be active in the Division of Neurosurgery as a Professor of Emeritus. He does not spend his time looking back on his previous achievements, but instead, continues to look forward by participating in new fields of neurological research.

Febe Brazeal

David Tillerson Smith

David Tillerson Smith was born in Anderson, South Carolina in 1898. He received his A.B. in 1918 and later, in 1949, an honorary D.Lit. from Furman University. He attended the Johns Hopkins School of Medicine and, after his graduation in 1922, remained there for a one-year internship in pediatrics. From there, he went to the Rockefeller Institute in New York to study pathology and bacteriology. During the course of his study, Dr. Smith contracted a severe case of tuberculosis and suffered a pulmonary hemorrhage. His illness slowed his progress only momentarily. While convalescing, he served as Bacteriologist, Pathologist, and Director of the Research Lab at the New York Hospital for Tuberculosis. He intensively studied tuberculosis and other non-TB diseases of the chest. He also completed a monograph on fusospirochetal diseases during this period of time.

Dr. Smith's experience at the TB sanatorium made him realize more than ever how important a close connection between the laboratory and clinical medicine is to effective patient care. In 1930, when given the choice of coming to the new Duke School of Medicine either as the Professor in charge of Microbiology or as an Associate Professor of Medicine, he chose to accept **both** positions. He made this decision so that he could participate in clinical teaching, which was given first priority in the new medical school, and have access to both the laboratory and the wards to continue his clinically oriented research.

The bacteriology course taught by Dr. Smith utilized subject materials from the hospital's central bacteriology laboratory. He did not attempt to cover every known organism in this course, but instead, concentrated on studying thoroughly each group of organisms that his class took up. These teaching duties always provided Dr. Smith a great deal of personal satisfaction. He refers to his election as "best pre-clinical teacher" by the Duke medical school body as his greatest honor.

Dr. Smith also received many honors for his outstanding research. In 1957, he received the Trudeau medal in recognition of meritorious work and research on tuberculosis. He was the recipient of the Medal for Distinguished Service from the Southern Tuberculosis Conference in 1958. His research at Duke was directed at the diagnosis, treatment, and prevention of chronic bacterial, mycotic, and nutritional diseases such as blastomycosis, tuberculosis, brucellosis, and pellagra.

His work on the disease caused by the fungus, *Blastomyces dermatitidis,* is typical of his research endeavors. While at the TB sanatorium, Dr. Smith saw numerous cases in which a patient was mistakenly admitted because local physicians were not able to differentiate fungal diseases from tuberculosis. He and his co-workers at Duke made improvements in treatment and diagnostic techniques their goals in fungal research. Dr. Smith reviewed the journal literature on blastomycosis and observed that there were a large number of conflicting reports on the effectiveness of potassium iodide therapy (the recommended therapy at the time). This conflicting information led Dr. Smith to hypothesize that the allergic status of the patient to the infecting fungus might determine whether or not iodide treatment would succeed. To examine this hypothesis, Dr. Smith began to test all blastomycosis patients with an injection of heat-killed fungi beneath the skin to test for an allergic reaction. If the patient was found to be allergic to the infection, he or she was then gradually desensitized with daily injections of increasing strengths of heat-killed blastomyces. Dr. Smith discovered that this procedure usually desensitized the patients enough to allow safe treatment of the infection with iodides, thus confirming his hypothesis.

In 1948, Dr. Smith completed his first edition of *Zinsser's Textbook of Bacteriology*. Dr. Zinsser's original work was one of the textbooks Dr. Smith studied as a medical student at Johns Hopkins. After Dr. Zinsser died, Dr. Bain Jones was asked by the publishers to write the next edition. The third edition was the first edition to be edited by Dr. Smith. He chose to retain Zinsser's name because he wanted to maintain continuity in the approach to teaching reflected in the original version. Three editions later, he changed the name to *Zinsser's Microbiology*. Although he no longer edits the book, he continues to write several chapters of each new edition. In addition, he has been the author of numerous other publications, including the *Manual of Clincal Mycology* and *Fungus Dieseases of the Lungs*.

The American Society of Pathologists and Bacteriologists, the Society of American Microbiologists, the American Society of Immunology, the American Thoracic Society, and the American Association of Physicians are some of the organizations which Dr. Smith has been a member during his illustrious career. He is also member of the National Tuberculosis Association (he served as that organization's president in 1950) and is a Fellow of the American Academy of Microbiologists.

Dr. Smith stepped down from the position of Chairman of the Department of Microbiology in 1959. In 1960, he was named the James B. Duke Professor of Microbiology, ad in 1963, he became the Chairman of the Department of Preventive Medicine. He is now officially retired from all of his positions, but he continues to be an active supporter of the Duke University School of Medicine.

Dr. Eugene Stead once said, "From the beginning I had the good sense to appreciate that David Smith was one of the giants of the Duke Medical School. I list him along with Davison, Hart, Hanes, and Beard. He had a foot in the basic science area as Professor of Bacteriology and a foot in the clinical service as Associate Professor of Medicine and the man Dr. Hanes left in charge in his absence. He interpreted the clinician's problems to his basic science colleagues and the scientist's problems to the clinicians. He was interested in having a small, highly personalized department of bacteriology. This allowed him to obtain credibility as a person above the fray who was not contending for space or money. He brough wisdom to our deliberations. As the years went by, I discussed with him many problems and benefited by his wisdom."[1]

Every student, house officer, and faculty member ever associated with the Duke University School of Medicine has certainly benefited from David Smith's invaluable wisdom.

Phil Buescher

1. Wagner, Galen G., Cebe, Bess, and Rozear, Marvin P. *E.A. Stead, Jr.: What This Patient Needs is a Doctor.* Durham, N.C.: Carolina Academic Press, 1978. p.164.

Julian Deryl Hart

From the moment he was hired by Dr. Davison to be the first Professor and Chairman of the Department of Surgery, Dr. Julian Deryl Hart devoted himself to the organization of the hospital and medical school, to administrative and physical planning, to research, and to the development of a medical center and Department of Surgery of high caliber. His untiring efforts resulted in a significant portion of the fine reputation Duke now enjoys.

Deryl Hart was born in Buena Vista, Georgia in 1891. He received a B.A. in 1916 and an M.A. in 1917 in mathematics from Emory University. His medical school training was done at the Johns Hopkins School of Medicine. He continued at Hopkins as a surgical resident and trained under Dr. William S. Halsted.

Dr. Hart was first approached about the position of Chairman of the Department of Surgery at the new medical school at Duke while he was a second-year chief resident. Dr. Sam Crowe asked him during a casual meeting if he would be interested in the position. Dr. Hart replied that he would not be interested in a full-time position because he wanted a private practice. One week later, Dr. Crowe again approached him and told him that the position would be part-time. This time, Dr. Hart indicated that he would be interested in the job. Shortly afterwards, Dean Davison officially offered him the position, and on March 9, 1929, Dr. Deryl Hart became the third member of the new medical school faculty.

His Duke responsibilities during his first year were awesome. He had to select a senior and resident surgical staff, choose the equipment for the Department of Surgery, and serve on a committee to select the other departmental chairmen of the medical faculty, the Dean of the Nursing School, the Hospital Administrator, and equipment for the entire hospital and Medical School. These tasks had to be completed by July 1930, only ten months after this thirty-four-year-old physician had completed his surgical residency.

The Department of Surgery was established by Dr. Hart with three objectives in mind; he wanted to establish a teaching program where "learning is by doing," provide the best patient care possible, and encourage research. He also stressed harmony, understanding, and mutual cooperation among the members of the department.

He gradually expanded the Surgery program to include a number of specialties. When an area of hospital's general surgery practice became large enough that a new faculty member could be hired, Dr. Hart would arrange it so a new subspecialty could be organized, and he would bring in a new chairman to head it. In 1937, the Neurosurgery Division, with Dr. Barnes Woodhall at its helm, became the first surgical specialty division. The number of specialty divisions continued to increase to meet the demands of the rapidly growing department.

One of Dr. Hart's greatest contributions, not only to Duke, but also to many other medical schools and hospitals, was the conception of the Private Diagnostic Clinic. Dr. Hart developed this idea during a period of severe economic distress. He felt that this organization would permit better diagnostic service to private patients and would conserve the time of the faculty for thier other duties. This cooperative group practice composed of the clinical staff members was designed to insure the best possible diagnostic services and treatment for patients through wide consultation and laboratory workup. Dr. Hart realized that in order to reach this goal, the schedule of fees would have to be low to encourage the use of consultation services. If the patient could pay only part of his bill, the doctors and hospital would agree to accept the same percentage of the amount collected as they would if the whole bill were paid in its entirety. The PDC was opened on September 15, 1931, and has acquired and excellent reputation as a superior diagnostic service.

Although Dr. Hart was primarily an administrator and a clinician, he also made significant contributions in the area of research. From the very beginning, post-operative infections plagued the Surgery Department. Cultures of every conceivable portion of the operating room revealed that the air was an important source of the major infecting agent, *Staphylococcus aureus.* Dr. Hart discovered that rays from a therapeutic ultraviolet lamp killed *S. aureus* at a distance of eight feet within sixty seconds. The results obtained by using the UV lamps were striking. The radiation killed almost all the bacteria about the operative area and supply tables and up to 90% even in the far corners of the room. The patients had less post-operative pain, and the rate of infection in clean wounds dropped from 33% to 3.8%. Dr. Hart's UV apparatus won the first award in a competition with 107 other medical exhibits at the 1936 annual meeting of the Southern Medical Association and was an extremely important development in the field of air sterilization.

Long hours in the operating suites and administrative duties prevented Dr. Hart from having much exposure to students' questions on the wards. He felt, however, that the students had a direct check on their clinical impressions through their participation in surgery. His students remember him for explaining everything well during the operation.

Dr. Hart displayed his administrative skills not only in the Surgery Department and the Medical Center, but also in the undergraduate university. In 1960, Dr. Hart resigned the post of Chairman of the Department of Surgery to become first President *pro tem,* and then President of Duke University. During his term as President, faculty salaries were raised to top-level pay grades among American universities. Duke was one of four universities having top pay. Harvard, Yale, and Princeton were the others. Another change that took place during the Hart years was that the number of distinguished professorships at Duke was doubled. His diplomacy and administrative talents were instrumental in carrying the University through a very difficult period of intensive planning and internal strife.

In 1963, Dr. Hart stepped down from the position of President and returned to the Department of Surgery as an active Professor for one year before reaching the mandatory retirement age of 70. He served as a consultant to the Department of Surgery and the Surgical Division of the PDC until September 1969. On June 1, 1980, Dr. Hart died of a stroke at his home. He always ascribed to a fundamental principle — work. His devotion, both to Duke and his work, contributed immensely to the solid foundation upon which the Duke University School of Medicine now stands.

Febe Brazeal

Philip Handler

Dr. Philip Handler, Chairman of the Department of Biochemistry at Duke from 1950 to 1969 and now on leave of absence from the medical school faculty, has served as President of the National Academy of Sciences in Washington since 1970. Beginning in 1939 when Dr. Handler first came to Duke, he established a well-deserved national reputation reflected in his selection to his important Washington position. First as a research scientist, teacher, innovative administrator, and author, and now as a spokesman for the American scientific community, Dr. Handler has been a consistent source of pride for Duke University.

Handler was born, raised, and received his early education in New York City. His early plans to become a practicing physician shifted during his senior year at the City College of New York to a career plan of medically oriented research. After receiving his B.S. in 1936, Handler attended the University of Illinois where he received his Ph.D. in Biochemistry in 1939. Next began Dr. Handler's long association with Duke; he served for one year as an Associate, then a year as an Assistant Professor of Physiology and Nutrition. From 1942 through 1945 he was an Associate Professor of Biochemistry, and in 1945 he was elevated to full Professor. In 1950, Dr. Handler was selected as Chairman of Biochemistry and was named a James B. Duke Professor.

Dr. Handler's research efforts have been varied and productive. While still in graduate school at Illinois his work as a junior chemist at the U.S. Regional Soybean Byproducts Laboratory resulted in two patents for the production of plastics from soybeans. Working wtih Dr. W.J. Dann at Duke, the relationship between pellagra and a diet deficient in niacin was further clarified. Dr. Handler then began studies on the diet of patients with renal disorders through which he elucidated important relationships between protein intake and blood pressure, pituitary effects on renal function, and the role played by the parathyroid gland in the renal excretion of phosphate. He next spent several years performing studies aimed at increasing our understanding of the metabolism of amino acids and proteins, including fundamental work on the mechanism of action of enzymes. At several points in the research career, Dr. Handler devoted his considerable energies to the practical application of research findings; his role in the enactment of legislation in North Carolina requiring nutritional fortification of corn meal products is ample evidence of this.

To recent graduates of Duke Medical School, and to current medical students, perhaps the most apparent of Dr. Handler's contributions to medical education is the central role he played in the development of the new curriculum. In the late 50's Dr. Handler foresaw the need to train selected medical students for future careers as basic science medical school faculty members. He led the way to the establishment of Duke of the Research Training Program in 1959, an "intensive training period of nine months" in which superior students "familiarized themselves with advanced research tools in a variety of fields by proceeding through a series of experiments under the guidance of specialists."[1] Students of the program complained, however, that the research year delayed their "opportunity for clinical experience with patients."[2] Indeed, medical students had for years complained that they had to wait two years after entrance to medical school before their first patient contact. These two problems, inadequate opportunity for special training and the long delay before medical students were given clinical experience, came to light during a period of transition in Duke's history. They were active building and planning years and years that saw the retirement of Duke's first dean and several department chairmen. Against this backdrop, several department chairmen first discussed the idea of a new curriculum in Dr. Handler's office in 1961. While the eventual definition and adoption of the new curriculum in 1966 was the result of the work of many, Dr. Handler's strong belief that the curriculum could be improved and his consistent ability to work compromises between differing factions during the planning played an inestimable role in achieving the goal. It is, at least, a reflection of Dr. Handler's foresight that the current Duke curriculum coupled with the combined degree programs are quite consistent with the philosophy of medical education he espoused thirty years ago.

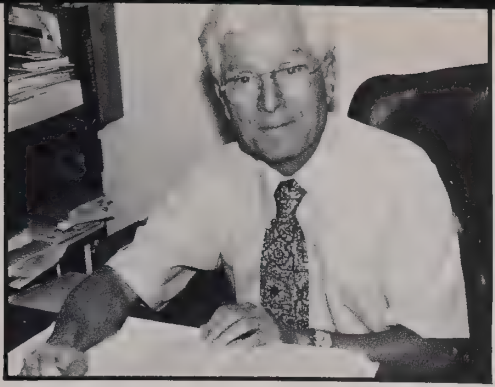
Dr. Handler's talents were not restricted to research and 'theoretical' side of medical education. He was consistently regarded by the medical students at Duke as one of the finest instructors of the basic science faculty. Furthermore, he collaborated with Dr. Abraham White and Dr. Emil Smith in the writing of *Principles of Biochemistry*. Since the first edition in 1954, the book has served as the standard by which other textbooks of biochemistry are measured.

One must wonder what has motivated this unusual man to achieve all that he has. The answer may lie in words written by Dr. Handler for an earlier edition of the *Aesculapian*. "I find intolerable a vision of the year 2000, when the American population will have doubled, if this must also mean twice as many hospital beds, rest homes, sanitaria, nurses, doctors, etc., etc. . . . Anatomy must be brought to its ultimate — the architecture of the macromolecules of which we are made. And physiology must be understood as a cooperative behavior of these molecules."

David Harlan

---

1. Handler P, Stead EA. Historical Background. In: Gifford JF, Anlyan WG, Busse EW, Kinney TD, eds. *Undergraduate Medical Education and the Elective System.* Durham: Duke University Press, 1978.
2. Philpott J. Speech prepared for the 50th Anniversity Convocation at Duke, 1975.



Jay Morris Arena

Line up the arrows. Push off the safety cap to your aspirin bottle. Much of the credit for safety containers belongs to Dr. Jay Morris Arena, the first graduate of the Duke University School of Medicine. Children have been first in Dr. Arena's heart throughout his distinguished career, and he has spent his life devoted to being a "kid-fixer."

Dr. Arena was born in 1909 in Clarksburg, West Virginia and was one of five children of Italian immigrants. His father was a bookkeeper who was able to send him to an Italian prep school in New York. During his summers, Dr. Arena was sort of a one-man recreation director for the neighborhood kids. He decided than that he wanted to work with children as a career, and more specifically, that he wanted to be a pediatrician.

He spent two years in undergraduate school and two years in medical school in West Virginia University. He then applied to and was accepted by Johns Hopkins University to complete his medical school training, but the depression came and ruined his father financially. Dr. Arena played a year of semi-pro baseball to earn enough money to finish medical school. He would have gone to Hopkins had it not been for the personal persuasion of Dr. Davison, who called and told him over the phone, "If you're good enough for Hopkins, I'll accept you over the phone for Duke."

In 1931, he came to Durham as one of eighteen transfer students who entered the first third-year class at Duke, and in 1932, became the medical school's first graduate. After completing medical school, he interned at Strong Memorial Hospital in Rochester, New York, and at Johns Hopkins. He returned to Duke for his assistant residency (1933-34) and residency (1934-35) in pediatrics. He served as an Instructor in Pediatrics at Vanderbilt University School of Medicine for one year, worked for a year as a pediatric consultant to a general practitioner in West Virginia, and in 1937, returned to Duke as a faculty member. Until his recent mandatory retirement at age 70, his positions were Professor of Pediatrics, Professor of Community Health Sciences, Director of the Duke Medical Centre Poison Control Center, and Secretary-Treasurer of the Duke Medical Alumni Association.

During his fifty-year career in medicine, Dr. Arena has demonstrated his many scholastic and leadership abilities through his election to Alpha Omega Alpha; his membership on eight editorial boards; and his participation in the American Academy of Pediatrics (executive Board 1965-72, Vice President 1970-71, President 1971-72), the American Association of Poison Control Centers (Executive Board 1953-73, Vice President 1968-70, President 1970-72), and the North Carolina Pediatric Society (President, 1964). He was also a member of the AMA delegation to the Peoples Republic of China in July 1974.

Dr. Arena's greatest contributions to medicine have been in the field of toxicology. His interest in poisoning began during his years as a student and house officer at Duke. Here he saw and treated many children with acute caustic alkali ("lye") poisoning. This experience of watching young children endure months and sometimes years of painful dilatations to keep a patent esophagus and surgery for those whose esophagi eventually closed off spurred an intense desire to look for perventive measures against poisoning, and for better methods of treating these tragic patients. His desire was increased by observing his own seven children as they displayed their natural curiosity in explorations of every nook and cranny of their home. During the early years of his practice, he received increasing numbers of calls from patients whose children had just ingested a toxic substance, and he soon realized that ingestions of drugs, household agents and insecticides were his most prevalent medical emergency. At this time, there was very little space in the medical literature devoted to the subject of accidental poisonings, but Dr. Arena learned through discussions with other physicians that the problem of poisoning was commonly seen by pediatricians and physicians everywhere. Unfortunately, accidental poisoning did not receive the widespread attention that it deserved until 1951, when a survey performed by the American Academy of Pediatrics' Committee on Accident Prevention revealed that the majority of accidents encountered in pediatric practice were due to poisoning.

Dr. Arena has been at the forefront of efforts to reduce the number of accidental poisonings that occur each year. He has written numerous articles and pamphlets designed to alert parents to the dangers that everyday household substances pose to inquisitive children. His book, *Child Safety is No Accident: A Parent's Handbook of Emergencies,* and pamphlets such as, *Your Child and Household Safety,* have been read by millions of parents. He has made films, television programs, slide shows, and dozens of presentations in an effective use of mass communication to educate parents. As a consultant to Ann Landers, he has been able to give Ms. Landers' 80 million readers the answer to many questions about child-care. He also strongly encourages all physicians to participate actively in safety education through office visits, local organizations, civic clubs and churches.

In the article published in JAMA 169:1188 (1959), Dr. Arena was the first to report the successful use of safety closures in the prevention of poisoning. His efforts and those of others ultimately resulted in the passage of the Poison Prevention Packaging Act of 1970 that required all potentially harmful household substances to be marketed in safety packaging. The introduction of safety packaging has led to a very significant decline in the incidence of accidental poisonings. Studies have shown that three out of four poisonings will not occur when safety packaging is properly used. Dr. Arena's contribution to this drastic reduction in morbidity cannot be overemphasized.

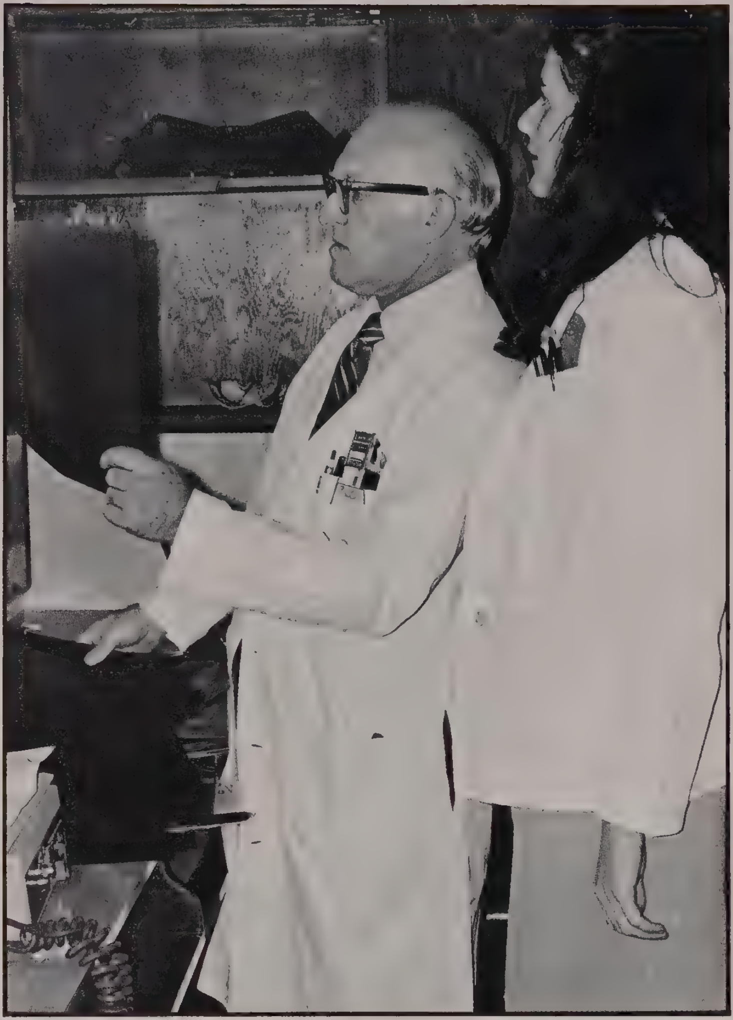
However, despite all efforts at prevention, accidental poisonings will still occur, and Dr. Arena has worked hard to insure proper medical care for these unfortunate patients.

In 1953, a Poison Control Center was established at Duke. Dr. Arena has served as Director of the Center since its inception and has been very active in the American Association of Poison Control Centers. He has also been instrumental in the education of physicians through his numerous articles and books and through his teaching of medical students and housestaff at Duke. As he states in the preface to the first edition of *Poisoning, — Toxicology, Symptons, Treatment,* ". . . every physician (no one is immune to an emergency call when poisoning has occured regardless of his speciality) should be alert at least to first aid measures and the basic principles of diagnosis and treatment."

Looking back on his career, Dr. Arena remembers many exciting and meaningful experiences, but one especially meaningful moment came in 1972, when during a trip by a group of pediatricians to Rome, he was blessed by Pope Paul VI. The Pope told them that he appreciated doctors who took care of children, because children mean so much to Jesus.

Nothing could have meant more to Dr. Jay Arena.

Febe Brazeal



George Jay Baylin

"Be critical, but understanding; be skeptical, but receptive; be provocative, but not punitive; strive to excite your colleagues, never to incite; distinguish critically between growth and development; and understand the basic difference between bigness and greatness." The author of these words, Dr. George Jay Baylin, has certainly demonstrated greatness rather than bigness during his career in radiology at the Duke University School of Medicine.

Dr. Baylin was born in Baltimore, Maryland on May 15, 1911. He received his A.B. degree from Johns Hopkins University in 1931. After spending one year as a zoology graduate student at Johns Hopkins, he enrolled in the Duke University School of Medicine. His career in teaching began during his medical school years; he taught anatomy to Duke medical students for three years before his own graduation in 1937. He then spent one year as a surgery intern at Sinai Hospital in Baltimore. He decided, however, that the wanted to pursue a career in radiology, and after an eight-month fellowship in pathology at Guys Hospital in London, he returned to Duke for his residency in radiology.

Upon the completion of his training in 1941, he was appointed Instructor in Radiology. He was Assistant Professor of Radiology from 1943 to 1946 and Associate Professor of Radiology from 1946 to 1950. In 1950, he was appointed Professor of Radiology, a position he still holds. He spent one year in Stockholm as a Fellow in Radiology at the Karolinska Institute of Radiology from 1950 to 1951. In 1973, he was named Chief of the ENT Division of the Department of Radiology and was appointed Professor of Otolaryngology in 1974. His latest appointment came in 1977, when he was named the R.J. Reynolds Professor of Medical Education.

Dr. Baylin's reseach interests cover many aspects of radiology. He was one of the pioneers in the use of isotopes for studying the function of the pancreas, liver, and kidney. He has been a leader in establishing X-ray criteria for the mastoid and middle ear. Along with Dr. Julian Ruffin, he has investigated the mechanisms of pain in peptic ulcer disease. He and Dr. Keith Grimson made some of the initial observations on the effect of vagotomy on gastrointestinal physiology. In collaboration with Dr. Philip Handler, he demonstrated the roentgenographic changes in animals on deficient diets. He has also done studies on pulmonary blood flow, renal conditioning, and renovascular hypertension.

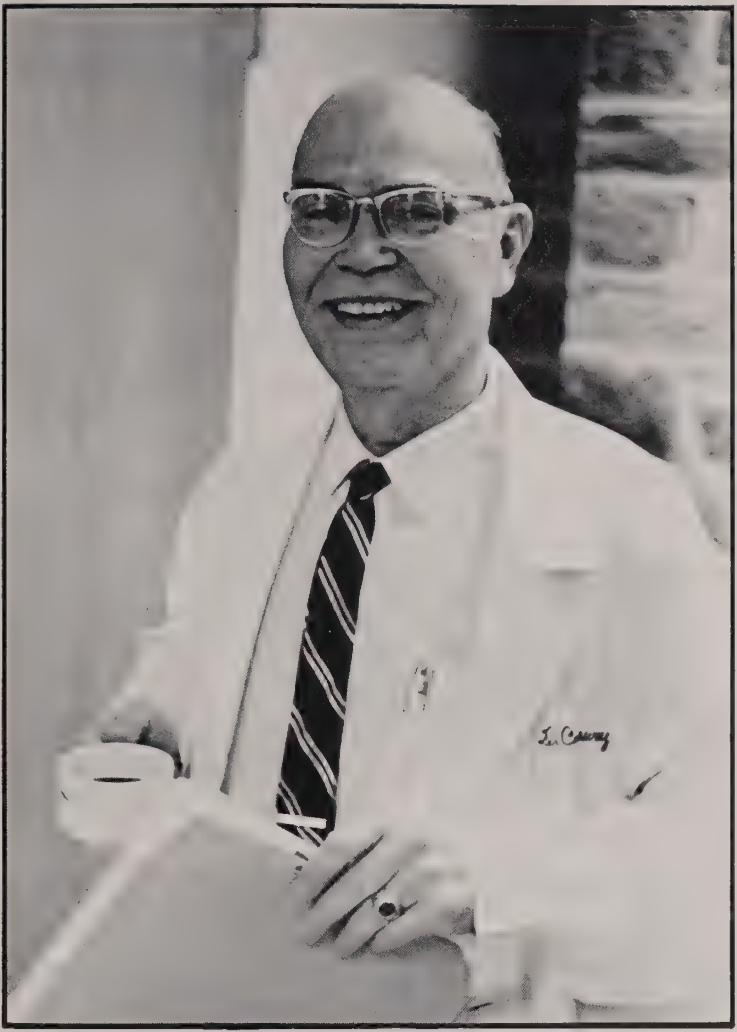
The North Carolina Medical Society has recognized Dr. Baylin's contributions to research on two occasions. In 1949, he received the Moore County Award for his presentation "The Roentgen Aspects of the Non-Opaque Pulmonary Foreign Bodies." He was also the recipient of the 1955 North Carolina Medical Society's Gold Medal Award for Research.

It may be, however, that Dr. Baylin's greatest contributions have been in the teaching profession. Few professors have commanded the respect and admiration from their students that Dr. Baylin has received from the very beginning of his teaching career. Perhaps his greatest value as a teacher is his insistence on considering all aspects of clinical and research problems before rendering an opinion on the roentgenogram. The common sense and wisdom that he impresses on each of his students is never forgotten. Duke medical students honored him in 1968 with the Golden Apple Award for Clinical Science. His pupils honored him again in 1976 by presenting him the Distinguished Teacher Award from the Duke Medical Alumni Association.

In addition to his research and teaching responsibilities, Dr. Baylin has found time to be active in a number of organizations. He is a member of the American College of Radiologists, New York Academy of Science, North Carolina Radiological Society (Chairman 1958), Southern Medical Society, North Carolina Medical Society, Sigma Xi, and Alpha Omega Alpha. He has served as Chairman of the Duke Divison of the United Community Fund, as a member of the Executive Board of the Durham United Medical Services, and as a member of the Board of Directors of the Duke University Medical Center Cancer Committee. He has also been a Consultant in Radiology for the Veterans Administration.

From all of the above information, it is not hard to see why Dr. George Baylin is considered to be one of the finest professors in the fifty-year history of the Duke University School of Medicine.

Febe Brazeal



Jasper Lamar Callaway

The true measure of the greatness of a medical school lies in the caliber of the physicians it produces. From its very inception, the Duke University School of Medicine has produced physicians of the highest quality. A prime example of this quality is Dr. Jasper Lamar Callaway. Dr. Callaway, a member of the graduating class of 1932, has distinguished himself as a leader in the field of dermatology and syphilogy.

Dr. Callaway was born in Cooper, Alabama, on April 5, 1911. He attended the University of Alabama as a undergraduate and continued there as a medical student until he transferred to Duke in 1931 and became a member of the new medical school's first class. After receiving his M.D. in 1932, he spent the next three years at Duke as an intern and resident in Internal Medicine. He left Durham in 1935 and spent two years as a fellow and instructor in Dermatology at the University of Pennsylvania. His sojourn from Durham, fortunately for Duke, was a brief one; in 1937, Dr. Callaway returned to his medical school alma mater as a Professor of Internal Medicine and Chief of the Division of Dermatology.

It was not long before Dr. Callaway was recognized nationally as an expert in dermatology, clinical mycology, and syphilology. During World War II, his expertise in the aforementioned areas was sought by the Veterans Administration, United States Public Health Service, and the Secretary of War. He also served as a National Consultant in Dermatology to the Surgeon General of the United States Air Force. At other times during his career, he has been a member of the National Serology Advisory Council, a member of the Special Advisory Group on Dermatology to the Veterans Administration, and a member of the Cutaneous Disease Section of the National Research Council.

Dr. Callaway has participated in many medical organizations. These include the American Academy of Dermatology (President 1971), American Association of Professors of Dermatology (President 1965), Southern Medical Association (Past Chairman on Section on Dermatology and Syphilis), Southern Dermatology Association (President 1950), American Medical Association (Chairman of Section on Dermatology (1962-63), North Carolina Medical Society (Chairman of Section on Dermatology 1968), American Dermatology Association (President (1958-59), Society of Investigative Dermatology (President 1955-56), Masters Dermatological Association (President 1979), American Board of Dermatology (President 1958-59), Baltimore-Washington Dermatology Society, and the American.Association of Medical Colleges. He is also a Fellow of the American College of Physicians. In addition, he is an active member of the Duke Medical Alumni Association and was the first secretary-treasurer of that organization.

Many scientific papers in the areas of dermatology, syphilology, and fungal diseases of the skin have been written by Dr. Callaway. He has also co-authored the books *Manual of Clinical Mycology* and *Dermatology for Students* and has served on the editorial boards of the *Archives of Dermatology and Syphilology, Journal of Investigative Dermatology,* and *Southern Medicine and Surgery.*

For his outstanding research and leadership, Dr. Callaway has received numerous honors. He has been elected to Phi Beta Kappa, Sigma Xi, Alpha Omega Alpha, and Theta Kappa Psi. In 1972, he received the Gold Medal from the American Academy of Dermatology. He has also been named a James B. Duke Professor of Dermatology. Duke honored him again in 1977 when a Chair was established in his name; the J. Lamar Callaway Professor of Dermatology is currently Dr. Gerald Lazarus. The Duke Medical Alumni Association presented him the Distinguished Teaching Award in 1978, and in 1979, he, Dr. Walter Kempner, and Dr. Edward S. Orgain were honored with a reception and dinner by the Department of Medicine.

Dr. Callaway relinquished the position of Chief of the Division of Dermatology in 1975; however, he is still a very active member of the Department of Internal Medicine. He continues to give lectures and to write on dermatology. In fact, the *Diagnosis of Skin Disease,* a book designed to provide doctors with a practical reference on hundreds of skin problems, has recently been authored by Drs. Callaway, Lazarus, Lowell, and Goldsmith. Dr. Callaway certainly ranks among the Duke University School of Medicine's finest alumni.

Febe Brazeal

Talmage Lee Peele

When Talmage Peele first came to Duke in 1925 to begin his undergraduate education, he did so reluctantly. Peele desired to attend the University of North Carolina, as did all but one of his Raleigh high school classmates. Nevertheless, a respected high school Latin teacher and a persuasive uncle, both Duke Alumni, convinced the 16 year old Peele to attend Duke. It is a decision which Dr. Peele says he has never regretted and one for which the Duke community must feel fortunate. In Peele's long association with Duke, which now spans over half a century, he has served the University as a respected teacher, researcher, clinician, and author.

As a young man, Peele's father had chosen a career in business over a career in medicine only to regret the decision as he aged. He subsequently instilled and nurtured an interest in medicine in his son. As a Duke student, Peele found the biological sciences to his liking and was further influenced, as a member of the Duke undergraduate premedical club, by Dean Davison who served as the club advisor.

When Peele received his undergraduate degree from Duke in 1929, the school of medicine was not yet open for application. Consequently, the following fall Peele traveled to Nashville where he matriculated in the Vanderbilt School of Medicine. There, Peele was exposed to a bright young Associate Professor named Francis Swett who was selected as the first Chairman of Anatomy at Duke in 1930. It was the time of the Depression and money for medical school was hard to come by so when Dr. Swett asked Peele to return to Duke in 1931 as a part time Instructor in Anatomy, Peele happily accepted. Dividing his time as a gross anatomy instructor and as a medical student, Peele graduated from the Duke School of Medicine in 1934.

It was during his junior and senior years at Duke that, through Dr. Frederick Hanes' influence, Peele first developed a special interest in neurology. This interest led Dr. Hanes to introduce Dr. Peele, then a Duke medical resident, to Dr. Foster Kennedy, a prominent neurologist of the day. Dr. Peele subsequently trained as a resident in neurology with Dr. Kennedy at Bellevue Hospital in New York from 1936 to 1937.

The following year, Dr. Peele traveled to Baltimore where he served as a fellow in anatomy with Dr. Gross at Johns Hopkins. He began his research career studying descending cortical projections from the parietal lobe of monkeys during that year. The year at Johns Hopkins was significant for other reasons. Dr. Peele was impressed by the eloquent lectures in neuroanatomy he heard given by Dr. Marion Hines and at the daily Anatomy Department lunch, he was able to meet many of the most distinguished anatomists of the era.

In 1938, Dr. Peele began a year at Rochester University School of Medicine where he recalls giving his first formal lecture in neuroanatomy. In 1939, Dr. Swett asked Dr. Peele to return to Duke as an Instructor of Anatomy. He has been a member of the Department of Anatomy ever since; as an Associate from 1940 to 1942, an Assistant Professor in 1943, an Associate Professor from 1943 to 1963, a Professor from 1963-1978, and Emeritus Professor of Anatomy since 1978. His excellence as a teacher of neuroanatomy is reflected in his selection for the Golden Apple Award in basic science of 1965-1966.

When Dr. Peele returned to Duke in 1939, while he was a trained neurologist, there was no room in the Department of Medicine for him. Nevertheless, Dr. Peele's talents were not untapped. He gave weekly Saturday morning neurology rounds for the pediatric residents, informally at first, but from 1958 through 1978 as an Assistant Professor of Pediatrics. His talent was not long overlooked by the Department of Medicine and in 1948 he was named as an Associate, from 1951 through 1973 he advanced from an Assistant Professor of Neurology to an Associate Professor, and after 1973 he served as a Professor of Neurology.

In addition to the positions he held in Pediatrics, Anatomy, and Medicine, Dr. Peele was also named as a lecturer in the Department of Psychology. Indeed, Dr. Cleland of the Duke Chapel once remarked to Dr. Peele that he held more titles than anyone else at Duke! What is more, Dr. Peele did not confine his educational energies to Duke. He served as a visiting lecturer of neurology at UNC from 1947 to 1950 and as a visiting lecturer of anatomy in UNC in 1955.

In his role as an Associate Professor of Neuroanatomy, Dr. Peele felt the need for a comprehensive text of neuroanatomy. He wrote that " . . . without some demonstrations of function of the neural organization, pure neuroanatomy tends to become uninteresting and complex to many medical students." He also felt that a text should convey that not all " . . . is cut and dried and that dogmatism has no place in medicine." Therefore, his writing made frequent reference to the current research in neurology and included appropriate experimental arguments. The early versions of his text, in the form of a lab manual, were well received and in 1954 the first edition of his *The Neuroanatomic Basis for Clinical Neurology* appeared. Dr. Marion Hines wrote of the work that " . . . for more experienced students . . . it contains information unavailable in any other book and is therefore in a class all its own." The text, now in its third edition, was more recently published in 1977.

His research interests have included limbic system anatomy and function, infantile paralysis, and the reaction of the spinal cord to injury. He was the first to bring monkeys to Duke for research and was instrumental in obtaining the first Horsley-Clarke stereotaxic apparatus at Duke.

Dr. Peele is a member of the North Carolina Neuropsychiatric Society, the American Association of Anatomists, the North Carolina Medical Society, the American Medical Association, and the American Academy of Neurology. He also served as the Duke Medical Alumni Association Secretary from 1947 to 1967; a position he much enjoyed.

Dr. Peele has been honored by faculty and students alike in his long tenure at Duke. Aside from the Golden Apple Award already mentioned, Dr. Peele was further honored by the students by having the 1967 Aesculapian dedicated to him. In 1974, Dr. Peele shared with Dr. Eugene Stead the first Distinguished Teaching Award from the Duke Medical Alumni Association.

First year medical students continue to enjoy lectures by Dr. Peele who plans to teach as long as he finds the task "fun" and can keep "the mental blocks" to a minimum. One can only hope that, for the future medical students at Duke, Dr. Peele will remain an active instructor of neurology and neuroanatomy for many years to come.

David Harlan

Thomas DeArman Kinney

Thomas DeArman Kinney was born in Franklin, Pennsylvania in 1909. He received his B.A. from the University of Pennsylvania and his M.D. from Duke University in 1936. The next two years were spent as an intern in medicine and surgery at John Hopkins. This was followed by a year of pathology at Yale and four years at the Mallory Institute of Pathology at the Boston City Hospital. In 1944, he joined the staff of the Peter Bent Brigham Hospital and Harvard Medical School.

While in Boston, Dr. Kinney and his wife Eleanor were well known for their hospitality to all levels of medical personnel. Their apartment was just across the street from a local pub and was a frequent meeting place for the down-trodden and monetarily poor pathology interns and residents. It was not uncommon for the Kinneys to take a medical student who was experiencing a great stress under their wing. Their concern and kindness followed them to Cleveland and then to Durham.

Dr. Kinney went to the Cleveland Metropolitan General Hospital in 1947. For thirteen years, he was Pathologist-in-Chief and Professor of Pathology at Case Western Reserve University School of Medicine. In 1960, Dr. Kinney returned to Duke as Pathologist-in-Chief, Professor of Pathology, and Chairman of the Department of Pathology; he was the first Duke University School of Medicine graduate to return as a department chairman.

During his tenure as Chairman of the Department of Pathology, Dr. Kinney developed a department which is widely known to be one of the most outstanding pathology departments in the United States. The reputation of its faculty, its research endeavors, its ability to attract excellent house officers, and its popularity with medical students as a teaching department are second to none.

While continuing his duties in the Pathology Department, Dr. Kinney became very involved in the field of medical education. In Cleveland, he had played an important role in the implementation of Case Western Reserve's revolutionary integrated curriculum of the 1950's. At Duke, he was one of the people who were very instrumental in developing and initiating the new medical curriculum. In 1967, he was named the first R.J. Reynolds Industries Professor of Medical Education and became Director of Medical and Allied Health Education in 1969. As Director of Medical Education, he successfully implemented the new curriculum, participated in the development of the M.D.-Ph.D. program, pioneered a two-year program to train Pathology Assistants, and developed a plan to integrate medical school with the premedical and residency years. In all of his contributions, he made sure that the interests of the medical students were protected and advanced.

Dr. Kinney published about 150 articles in scientific journals and contributed chapters to several books in the space of thirty-seven years. His major research interest was in the field of nutritional pathology. At Harvard, he, along with Dr. F.J. Stare and D.M. Hegsted, studied the pathologic effects of choline and low-protein diets. He and Dr. C.A. Finch also began investigation on iron metabolism. Iron metabolism and, in particular, factors modulating iron absorption were studied intensively by Dr. Kinney and were the subjects of over fifty of his papers. In 1954, he began to examine the effects of ethionine on various organs, particularly the pancreas, and found that ethionine destruction of the pancreas resulted in the accumulation of iron in the liver. Dr. Kinney was also interested in automation in clinical laboratories. He and Mr. Phillip Pickett turned this interest into practical items by inventing several pieces of equipment, including the Lab Tek and disposible knife blade and a complicated processor for electron microscopy specimens. Other of Dr. Kinney's papers dealt with medical education, problems faced by the pathology profession, and how to improve the status of pathology. Even the animal kingdom was not neglected by Dr. Kinney; he, Dr. D.B. Hackel, and Dr. W. Wendt, in collaboration with the Cleveland Zoo, described an interatrial septal defect in a chimpanzee, an adenocarcinoma of the thyroid in a bear, and toxoplasmosis in a kangaroo.

Of the twenty-seven societies in which he was a member, Dr. Kinney served as president of six: the American Association of Pathologists and Bacteriologists, the American Society for Experimental Pathology, the Association of Pathology Chairmen, the Federation of American Societies of Experimental Biology, the Universities Associated for Research and Education in Pathology, and the Cleveland Academy of Medicine. He has been Chairman of the Council of Academic Societies of the American Association of Medical Colleges and Chairman of the American Association of Medical Colleges — American Medical Association Liason Committee on Medical Education. These are only a few of the offices, chairmanships, and consultant positions that Dr. Kinney held during his distinguished career.

Dr. Kinney was also committed to medical publishing. He was Associate Editor (1945-47) and Editor (1948-49) of the **Bulletin of the International Association of Medical Museums.** He and Nathan Kaufman were the founding editors of **Laboratory Investigations,** a journal designed to communicate new concepts and techniques in pathology. From 1967 to 1977, he was the Editor-in-Chief of the **American Journal of Pathology.**

Many awards have been bestowed upon Dr. Kinney. Of these, the one he took the greatest pride and satisfaction in was the special Kinney Award established by the students of the Duke University School of Medicine in his honor. This award is given each year to a faculty member for excellence in teaching. Among the other awards received by Dr. Kinney are the Whipple Lecture, University of Rochester, 1973; the Weller Lecture, University of Michigan, 1975; Distinguished Teaching Award, Duke University School of Medicine Alumni Association, 1975; Distinguished Service Award, College of American Pathologists — American Society of Clinical Pathologists, 1976; Commendation, Universities Associated for Research and Education in Pathology, 1975; and the Gold Headed Cane, American Association of Pathologists and Bacteriologists, 1977.

Dr. Kinney retired as Chairman of the Department of Pathology in 1975. He remained as Professor Pathology and as the R.J. Reynolds Industries Professor of Medical Education until his death in June of 1977.

Febe Brazeal

Francis Bayard Carter

Dr. Francis Bayard Carter was a man devoted to teaching. He lived to teach and to be available to his house staff and students and was greatly admired and respected because of it. An extraordinary ability to communicate with others was one of his most outstanding features. The late Dr. James T. Cleland, former Dean of the Chapel and a neighbor and close friend of Dr. Carter, once remarked on Dr. Carter's "capacity for using the English language, both the Queen's English and a more republican dialect" and concluded that "such a mastery of the technique of communication is one sign of a great teacher." Without a doubt, "Nick" Carter (no one ever called him doctor) was one of the finest educators in the history of the Duke University School of Medicine.

Dr. Carter was born in Wilmington, Delaware in 1899. He received his B.A. degree and later an honorary Doctor of Science degree from the University of Delaware. For three years, he studied at Oxford University, Balliol College as a Rhodes Scholar. In addition to his academic pursuits, he excelled in athletics and became the Heavyweight Boxing Champion of England. Upon his return to the United States, he enrolled in the Johns Hopkins School of Medicine and received his M.D. in 1925. He interned in obstetrics and gynecology at the New Haven Hospital and did residencies in bother internal medicine and ob-gyn at the University of Virginia Hospital. After completing his residency training, he remained on the University Virginia School of Medicine faculty until 1931, when he came to Duke as Professor and Chairman of the Department of Obstetrics and Gynecology.

The obstetrics and gynecology rotation during the Carter years was designed in the following manner. The students were assigned cases as they came into the wards. Each student's assignments were divided equally between obstetrics and gynecology. Seminars on commonly encountered disorders were held once a week. Students also participated in preoperative and predelivery clinics twice a week in preparation for the operating and delivery room experiences. Because a large proportion of North Carolina's population was not oriented toward hospital delivery and because Duke, as a referral center, handled a high percentage of complicated deliveries, Dr. Carter assigned the students to a prenatal clinic and home delivery service in Charlotte so that they could participate in a adequate number of normal deliveries. For three week periods, students attended prenatal and antisyphilitic clinics, were on call for deliveries, and were responsible for four post-partum visits to each of the sixteen mothers they delivered on an average tour. Dr. Carter included this experience in the ob-gyn rotation because he felt that every students should participate in enough deliveries to acquire a sense of wonder at the beauty of the normal process.

Dr. Carter will long be remembered for his unique manner of verbal communication with his patients and students. On one hand, he was very kind and gentle with his critically ill patients; on the other hand, he was equally caustic with non-compliant patients and would often threaten not to return if the patient did not begin to follow his instructions. He kept up a steady stream of banter with his patients, and this banter was interrupted only very quickly and briefly to ask or answer questions. He also expected students to reply to questions in the same quick and bried manner; an inadequate reply to a question about the course of treatment usually brought the retort that such ideas often killed patients.

Research was generally left by Dr. Carter to those who felt more gifted in that area of endeavor; however, he did perform some very notable studies designed to describe the normal bacterial content of the vagina in pregnant women. It was essential to describe the normal flora before pathogenic agents could be described. Infections were a very important source of morbidity and mortality among obstetric patients in the early years of Duke Hospital; during the first two years, the mortality rate among patients with infections in the blood stream following childbirth or abortion approached thirteen per cent.

Dr. Carter and his technician, C.P. Jones, studied the vaginal smears from 114 pregnant women and 100 non-pregnant gyn patients who showed no sign of physical abnormality or vaginal tract disease and who were receiving no vaginal therapy. To the methods used in previous studies, they added anaerobic culturing. When compared to the findings of earlier studies, their results demonstrated a relatively higher incidence of fungi and anaerobic organisms and established the importance of proper preparation and evaluation of anaerobic cultures before an accurate diagnosis of vaginal tract infections could be made. From their data, Cater and Jones defined the normal vaginal flora against which to measure test results from infected patients.

They also extensively studied fungi of the genus Monilia (later Candida) and classified some 535 strains of Monilia into a system of six species, including a new species, the stellatoidea, which they discovered. Their methods and terminology were widely publicized so that other physicians and hospitals could use them as diagnostic and communication tools.

Dr. Carter was very respected by his Ob-Gyn colleagues. He was a member of at least a dozen medical societies and served as President of three of the largest: the American Academy of Obstetrics and Gynecology, the American Boards of Obstetrics and Gynecology, and the American Association of Obstetrics and Gynecology. He was honored again by his colleagues when the Algernon Sydney Sullivan Award was bestowed upon him for distinguished service to the South.

In 1968, Dr. Carter retired from his position as Professor and Chairman of the Department of Obstetrics and Gynecology. With his death in 1976, the medical profession lost one of its finest educators and leaders, and Duke lost one of its most beloved professors.

Febe Brazeal

Wiley Davis Forbus

Years after Dean Davison selected Wiley Forbus as the architect of the fledgling Duke Medical School's Department of Pathology, he explained the decision with these words. "I hired Dr. Forbus because he was the most intensely interested man in pathology I had ever contacted. I went to Dr. MacCallum (then the Chairman of Pathology at Johns Hopkins University) to confirm my impression, and Dr. MacCallum stated that Dr. Forbus could in no way be diverted from his study and devotion to general pathology." The selection was one which Dean Davison surely never questioned, as Dr. Forbus, in his thirty year tenure as Chairman, established the Pathology Department at Duke as one of the South's finest. Moreover, Dr. Forbus was a respected teacher; a scientist with great state, national, and international influence; and a major force in the building of the reputation which the Duke University Medical Center now enjoys.

Dr. Forbus was a lifelong Southerner. He was born in Zieglerville, Mississippi in 1894, a small community of four general stores, one of which was owned by his father. His early interests, like those of his peers, were hunting and fishing. He was educated locally until he reached high school age, at which time he traveled each fall to Greenville, Mississippi for his schooling. Next came four years at Washington and Lee University in Virginia where Dr. Forbus was Phi Beta Kappa. Before his graduation in 1916, he served for one year as an Assistant in Chemistry at Washington and Lee. Using his undergraduate training, Dr. Forbus taught general sciences for the next three years in Washington area schools (1916-1919).

It has been said that it was the next year, 1920, that the Department of Pathology at Duke began, for it was then that Wiley Forbus, a freshman medical student at Johns Hopkins, was first introduced to surgical pathology by a senior medical student. The enthusiasm with which Dr. Forbus approached the study of pathology was immediately apparent, and he spent much of his free time that first year in the surgical pathology laboratory. Later exposure to general pathology under Dr. MacCallum further fueled Dr. Forbus' interest and enthusiasm.

Dr. Forbus was an excellent student (he was named to the Alpha Omega Alpha medical honorary) and upon his graduation from medical school in 1923, his appointment to the house staff at Johns Hopkins followed naturally. Dr. Forbus progressed through the Chief Residency in Pathology at Johns Hopkins to a position as Associate Pathologist during the period from 1923-1930. In 1927, Dean Davison, then the only faculty member of the Duke University School of Medicine, approached his friend Dr. Forbus for advice regarding the blueprints of the Pathology Department. It was not until 1929, however, after Dr. Forbus had returned from a year of study in Munich at the Pathologisches Institut der Ludwig Maximilians Universitat, that negotiations were begun which culminated in the appointment of Dr. Forbus as Chairman of Pathology at Duke. The department began work on July 20, 1930.

From the outset, Dr. Forbus decided that the department should serve as a training center for academic pathologists, and house staff selections were made with this goal in mind. Training was designed to cultivate the interest of the house staff in academic work, and upon completion of the residency, the young physicians were retained on the senior staff until such time as a position elsewhere opened. The success of Dr. Forbus' efforts in developing academicians cannot be questioned; at the time of his death in 1976, his former residents included over 30 professors, approximately 15 chairmen of pathology departments, and at least 5 medical school deans.

As a teacher, Dr. Forbus believed that the relationship of the student and professor should be one of mutual respect. He wrote, "First, they (medical students) are persons possessed of an unusual zeal for the work that they have undertaken; second, they are quite as intelligent as their instructors; third, they usually are influenced profoundly by the point of view and teachings of those who introduced them to the subject of disease." He felt that the most important lesson to be taught was that "the study of disease begins long before entrance to the medical school and must continue indefinitely thereafter." Therefore, he chose not to lecture his students but rather to interact with students using comparative case studies, involvement in routine autopsies, and weekly journal hours. The overall view which Dr. Forbus hoped his students would grasp was his belief that "disease is a matter of the abnormal outcome of a constantly changing relation between the ultimate biological unit, the cell, and its environment." It was this view of pathology which served as the basic tenet of Dr. Forbus' two volume textbook, *Reaction to Injury,* which has been called one of the most influential pathology textbooks ever published.

During his long career, Dr. Forbus was a scientist of national influence. He served on the National Board of Medical Examiners, as an Associate Editor of the Archives of Pathology, and as a consultant for several groups including the Veterans Administration, the Atomic Energy Commission, the Armed Forces Institute of Pathology, and the Walter Reed Army Hospital. He served as President of the American Association of Pathologists and Bacteriologists in 1947.

On the international level, Dr. Forbus spent almost as much time in the Far East in the 1950's as he spent at Duke. His experience as a medical educator was tapped in the reorganization of the Taiwan University Medical School and the medical school at Keio University in Tokyo. He served as a consultant to a number of foreign medical missions, including a mission to China in 1953 under the auspices of the Foreign Operations Administration, the Atomic Bomb Casualty Commission in Japan in 1953 and 1956, and a mission to China in 1956 under the auspices of the China Medical Board. The list goes on. The first clinical pathology laboratory of the Chinese Nationalist Army in Taiwan was established under his direction in 1954. That laboratory was named in his honor.

Dr. Forbus' contributions to the world of medicine did not go unrecognized. In 1975 he was awarded the Gold-Headed Cane Award by the American Association of Pathologists and Bacteriologists. At the ceremony honoring him, Dr. Forbus was described as a "pathologist who represents the highest ideals in pathology and medicine."

Late in his life, the man whose boyhood interests had been hunting and fishing described his "hobbies" with these words, "My hobby has been my business, medicine."

David Harlan

Francis Huntington Swett

In the early days of the medical school, personal relationships between the medical student and the professor were much more common than they are today. Many students were profoundly influenced by their relationships with a particular faculty member. Dr. Francis Swett, the first Chairman of Anatomy at Duke, was one whose influence both inside and outside the classroom greatly affected the lives of many of those who came in contact with him.

Francis Huntington Swett was born in Norway, Maine in 1893. To many he was the archetypal Maine native. Laconic, hard working, and frugal; he had a deeply felt sense of responsibility and service.

As a young man, Swett attended Bates College where his talents were recognized by a biology professor who cultivated the student's interest in the field of biology. After receiving his A.B. in 1916, with Phi Beta Kappa honors, Swett traveled to Brown University as an Assistant in Zoology. He expected the same dedication and preparation from his professors that he later expected from his students; a teaching point carelessly made in his presence rarely went unquestioned. After receiving his M.A. in 1917, Swett left Brown to teach premedical studies at Tufts for a year. Then, during WWI, he served in the Medical Corps at Walter Reed Hospital and later at the Army Neurosurgical Laboratory in Baltimore. When he completed his military obligation, he began his doctoral work at Yale where he was described as "clear-headed, slow to speak, critically analytical" and as one who "hated sham and front."[1] Sweet completed his work for the Ph.D. in 1922 and went to Baltimore where he taught at the Johns Hopkins as Instructor and later Associate in Anatomy until 1925. Next came five years as Associate Professor of Anatomy at Vanderbilt University.

Dr. Swett was named the Chairman of the Anatomy Department at Duke in 1930. He built the department around a few strongly felt beliefs. First, he believed that the primary role of the medical school was to teach students, and therefore each of his faculty members was expected to carry his load of that responsibility. Second, he wrote, "Ideally and logically it might be expected that the teacher would seek to impart that enthusiasm for the subject which he himself has — or had."[2] He believed that the instructor's enthusiasm could best be maintained through active participation in ongoing research. Third, he believed that a teaching institution was best served by a faculty with diverse research interests; group research on a narrow topic was not practiced in his department.

Dr. Swett realized that the learning process was "the result of that intangible interplay between the teacher, the receptive mind of the student, and the subject matter. No one of these phases can be disregarded, except at the expense of the others."[2] He was a perceptive observer of his students; he learned names and personal histories but more importantly, he was able to determine a student's motivation, sincerity, and comfort while working in the laboratory. He was tolerant of slower students if they were hard working but quite intolerant of a skilled but lazy student. He understood that the average medical student was not studying to become a Ph.D. in anatomy, and he therefore sought to "teach the simplicity and fundamental character of his subject."[2] Within this framework, Dr. Swett attempted to individualize his teaching so that "each student (could) get a perfect fit, irrespective of his mental ability."[2]

These characteristics of Dr. Swett did not endear him to all his students. Many were suspicious of his interest in their personalities and others were uncomfortable with his honesty. When Dr. Sweet would advise his students to take the day off because it was too hot to work in the laboratory or because they would otherwise miss a big Duke game, some felt that Dr. Swett was testing their interest in anatomy. Such motives were foreign to Dr. Swett; he was genuinely concerned about the welfare of his students. When the banks closed during the depression, he called the students together and assured them that he would arrange for loans for them if necessary. Any student appearing in the laboratory with a cold would be admonished to go home and take care of himself. While it was true that he was not understood by all, those students who did understand him would never think of letting him down.

A biography of Dr. Swett is not complete without mention of his wife, the former Elizabeth Glenn of Baltimore, whom he married in 1924. At Vanderbilt and at Duke, Mrs. Swett served as an informal personnel director. Like a mother to many of the medical students, she always knew when a student was troubled with a personal problem. When a male student would have a girlfriend visit from out of town for a dance, there was always a room for her at the Swett's.

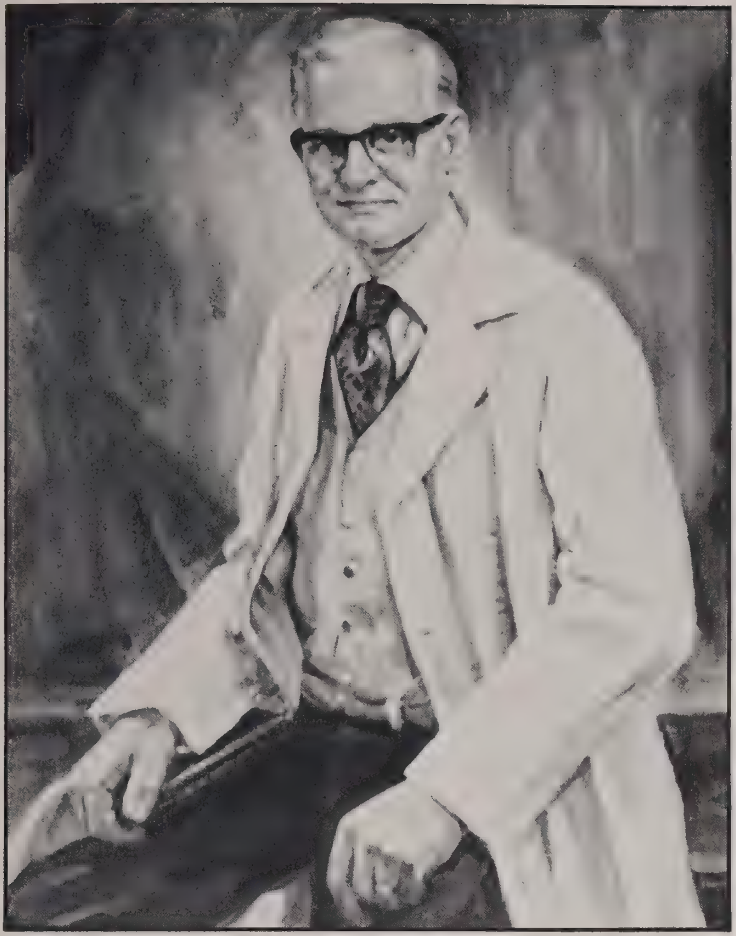
Dr. Swett was a meticulous research scientist and he enjoyed national stature as reflected by his election as Secretary Treasurer of the American Association of Anatomists. His twelve-year study of the girdle and its relationship to the developing limb is ample evidence of his belief that all work should be characterized by "care, accuracy of observation and statement, and also completeness."[2] Through his studies, Dr. Swett did much to clarify the limb-girdle interrelation.

After attending a Duke-Duquesne basketball game on February 10, 1943, Dr. Swett returned to his office to take care of some unfinished business when he suffered a fatal heart attack. It is a tribute to his assiduous nature that these words could be written about his research at the time of his death, "(His) work is not finished and the final answer was denied him. What he did, however, need never be repeated. It is the foundation for the future as he planned it."

David Harlan

---

1. Nicholas JS, Hetherington DC, Streeter GL, "Francis Huntington Swett," *Anatomical Record* 86:3-11, 1943.
2. Swett, FH, "requirements versus preparation for the study of medicine," *Journal of the Association of American Medical Colleges* 19:206-216, 1944.



Norman Francis Conant

Norman Francis Conant was born on March 9, 1908, in Walpole, Massachusetts. He received his B.S. degree from Bates College in 1930 and then went to Harvard University, where he received his M.A. in 1931 and his Ph.D. in Mycology in 1933. His affiliation with Harvard continued for two more years; from 1933 to 1934, he was the Sheldon Traveling Fellow in Medical Mycology in Paris, and from 1934 to 1935, he was an Assistant in Bacteriology at Harvard.

Durham became Dr. Conant's home in 1935 when he came to Duke as an Instructor in Bacteriology. He has served as an Associate in Bacteriology (1936-38), Assistant Professor of Bacteriology and Mycology (1938-46), and Professor of Mycology and Associate Professor of Bacteriology (1946-58). In 1958, he was appointed to the position of Professor and Chairman of the Department of Microbiology. He stepped down from the Position of Chairman in 1968 but continued as a James B. Duke Distinguished Professor of Mycology until his retirement in 1974.

Dr. Conant was "one of the top ten mycologists, not only in the nation, but in the world," according to Dr. Suydam Osterhout, and his expertise in the field of fungal diseases was called upon quite frequently. During World War II, he was a Lecturer in Mycology at the Army Medical School and a Consultant to the Secretary of War. In 1944, he taught mycology at Oswaldo Cruz and the University of Sao Paulo. Dr. Conant has been a consultant for the Communicable Disease Center in Atlanta (1947-49), a member of the Advisor Panel on Microbiology for the Office of Naval Research (1952-57), a member of the Graduate Training Program Study Section of the National Institute of Allergy and Infectious Diesease (1957-60), Chairman of the Infectious Disease and Tropical Medicine Training Grant Committee (1960-61), a member of the National Allergy and Infectious Disease Advisory Council (1962-65), and Chairman of the Standards and Exam Committee of the American Board of Microbiology (1962-63).

His contributions to scientific literature have been numerous. In addition to many journal publications on his mycological research, he has co-edited and continues to contribute to *Zinsser's Microbiology.* He, Dr. D.T. Smith, Dr. R.D. Baker, and Dr. J.L. Callaway have written the *Manual of Clinical Mycology.* He has also served on the editorial boards of publications such as *Mycopathologia, Farlowia, Biological Abstracts, Mycologia,* and the *Journal of Investigative Dermatology.*

Dr. Conant's skill as a teacher matched his skill as a mycologist. He has always had the utmost respect from Duke medical students, and in 1972, he received the Golden Apple Award in recognition of his excellence as a basic science teacher. For many years, Dr. Conant taught a clinical mycology course during the summer; this course was always filled to capacity with learners from all over the nation who were eager to be taught by this outstanding professor.

Occasionally, Dr. Conant would be seen walking down the halls of Duke Hospital with a very large package in his arms. He would go into the microbiology lab and put the package down on a tin table. The heavy package made a very loud noise when it was dropped on the tin table, and everyone in the vicinity would turn to see what the clamor was all about. To their surprise, they would find a cow's head staring at them. The head would be from a cow with lumpy jaw disease caused by *Actinomyces bovis.* Dr. Conant had made a special trip to the slaughterhouse in order to get specimens for his students.

Every Duke medical student learned how to identify enteric bacteria using differential media during Dr. Conant's microbiology course. Before attacking their own specimens, they were shown how the media should look after inoculation with the various bacteria. What Dr. Conant's students did not know was that none of the media shown to them during the demonstration had ever been inoculated with bacteria! Dr. Conant had actually used acid and alkali to adjust the pH, had blown bubbles into the media with a pasteur pipette to simulate gas production, and so on, instead of actually using bacteria on the media.

In spite of his busy career, Dr. Conant found time to do a great deal of farming. He and his large family grew their own vegetables and raised their own livestock. He was also instrumental in the preservation of their homegrown food; he was often seen at night autoclaving his family's canned vegetables and preserves in the microbiology laboratory. The man who taught medical students about botulism certainly did everything in his power to insure that his family would not fall victim to that disease.

Dr. Conant continues to do some work at Duke but spends most of his retirement days at his Durham home or at his home in the mountains. He is a very warm, personable, and down-to-earth individual who ranks as one of the nation's greatest scientists.

Febe Brazeal

OUTSTANDING FACULTY AND ALUMNI

Within any sector there are those who hold distinction because of their accomplishments and services rendered. The Medical Center and University have established the following awards to recognize distinctive, astute individuals who through their innumerable accomplishments have generated and fostered the atmosphere of unparalleled achievement that is the wellspring of Duke's reputation as a major center of medical excellence.

The Distinguished Alumni Award recognizes persons who received medical training at Duke and who by their achievements merit recognition. The title of Honorary Alumnus is bestowed upon individuals whose contributions to Duke have been of uniquely meritorious dimensions. Distinguished Service Awards are given for outstanding service to the school. The Golden Apple Awards which are presented by the student body recognize members on the basic and clinical faculty and on the housestaff who provide extraordinary teaching, role models and concern for the medical students. To those judged by their peers as outstanding teachers, the Distinguished Teaching Award is given. The Kinney Award, established in honor of the late Dr. Thomas Kinney and presented by the graduating class of the medical school, recognizes professors for excellence in teaching. Distinguished Professors, named yearly by the University, are those faculty who contribute significantly to the advancement of knowledge in their particular field.

While it may seem that many have been acknowledged for their contributions to medicine, it must be known that there are countless others who in their daily efforts contribute to the field, and that the individuals recognized here are a small representation of the whole.

C.D.G.

4

OUTSTANDING FACULTY AND ALUMNI

Distinguished Alumni 55

Honorary Alumni 68

Distinguished Service Awards 68

Golden Apple Awards 69

Distinguished Teaching Awards 70

Thomas D. Kinney Awards 70

Distinguished Professors 71

Deceased Distinguished Professors 77

Professors Emeriti 78

Section Editor
Candis D. Grace

De musculis digito
moventibus. Ca.
Qui super iis libro
digitorum
AN. AET. XXVIII

1969

Raymond D. Adams, M.D.

Dr. Adams' reputation is one of international stature and his research in neurology has earned him honorary memberships in the British Society of Neurology, the Swiss Society of Neurology and Psychiatry and the German Society of Neuropathology. He is a member of the Boston Society of Psychiatry and Neurology, the American Neurological Association, the American Association of Neuropathologists and the Association of Research in Nervous and Mental Disease.

After receiving his A.B. and A.M. degrees from the University of Oregon, Dr. Adams entered the Duke Medical School in 1933. Following internship and residency at Duke, in 1938, he joined the teaching staff of Harvard Medical School and began the practice of Neurology at Massachusetts General Hospital.

His major contributions in research have included extensive studies on disorders of muscle, and his textbook, with Denny-Brown and Pearson, entitled *Diseases of Muscle* is the classic in the field.

1971

Ivan L. Bennett, Jr., M.D.

Dr. Ivan L. Bennett, Jr., who served as assistant resident physician at Duke Hospital in 1950-51, is vice-president for health affairs and director of the medical center at New York University, as well as professor and Dean of the School of Medicine there. He has been associated with NYU since 1969, at which time he left the position of deputy director of the Office of Science and Technology of the Office of the President of the United States.

Dr. Bennett attended both undergraduate and medical school at Emory, receiving his A.B. there in 1943 and his M.D. in 1946. He held teaching positions at Emory, Yale and Johns Hopkins prior to his NYU appointment, and hospital staff positions in New Haven, Ct. and Baltimore and Bethesda, Md.

Dr. Bennett has been a consultant to the President's Office of Science and Technology, the Secretary of Health, Education and Welfare and the Office of Energy Planning. He has served on numerous United Nations and other international health and science committees.

DISTINGUISHED ALUMNI

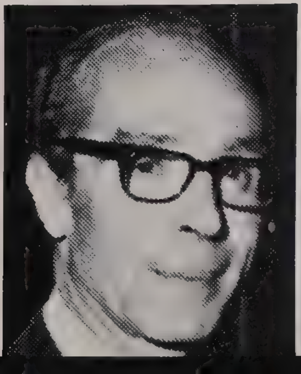
Born in Winston-Salem and educated at UNC and Duke, Dr. Bondurant was named Phi Beta Kappa at UNC before entering Duke Medical School. As an intern and later resident in the department of medicine here, he held a U.S. Public Health Service fellowship. In 1958 he completed his senior residency in medicine at Boston's Peter Brent Brigham Hospital.

Since that time Dr. Bondurant has been an assistant, associate, and full professor of medicine at Indiana University School of Medicine, executive vice president and dean of the Albany Medical College as well as Professor and Chairman of their Department of Medicine-activities, earning him faculty membership to AOA.

Dr. Bondurant, a member of twelve national organizations, has held major offices over a period of years. He has been editor of **Clinical Research,** the American Federation for Clinical Research publication, and served on editor boards of other medical journals. The American Heart Association awarded him a Citation for Distinguished Service to Research. He also received the U.S. Air Force Award for Meritorious Civilian Service.

Stuart O. Bondurant, M.D.

1974



Dr. Bressler went to the College of Medicine at the University of Arizona, where he became Professor and Chairman of Pharmacology, Professor of Medicine, and head of the Division of Clinical Pharmacology. Earning a B.S. degree at McGill University in 1954, he came to Duke and received the M.D. in 1957, having been elected to Alpha Omega Alpha honorary society. He spent two years at Yale, as an intern and junior assistant resident, before coming back to Duke. A year's residency in medicine was followed by a year as a fellow in biochemistry.

He became an assistant professor of medicine in 1963, and in 1969 was appointed head of the Division of Clinical Pharmacology in the Department of Physiology and Pharmacology at the University of Arizona.

Rubin Bressler, M.D.

1975

1973

Ivan Brown, M.D.

Dr. Brown entered Duke Medical School in 1936 from the University of Rochester, and received both the B.S. and M.D. degrees at Duke in 1940. He was an intern and assistant resident in pathology at Duke Hospital from 1940 to 1942, before leaving for World War II service with the Duke-affiliated 65th General Hospital of the U.S. Army. He returned to Duke in 1945 to an assistant residency in surgery. From 1948 to 1953 he was a Markle Scholar in medical science, then a resident in general and thoracic surgery in 1953-54. Before the war, Dr. Brown had been an instructor in pathology in the medical school, and upon his return joined the surgery faculty. In 1965 he received Duke University's highest honor for its faculty, being named James B. Duke Professor of Surgery. He later practiced thoracic-cardiovascular surgery at the Watson Clinic in Lakeland, Florida.

1973

C.D. Christian, M.D., Ph.D.

Both of Dr. Christian's graduate degrees were earned at Duke. After finishing undergraduate work at the University of Kansas in 1952 he entered the graduate school at Duke and, upon finishing his doctorate, entered the medical school and completed his M.D. in 1958. While he was a medical student he held an instructor's position in the Department of Anatomy, and he served his internship at Duke before leaving for residency at Columbia-Presbyterian Medical Center.

He completed his residency in obstetrics and gynecology, during which he was a fellow of the Macy Foundation. He went to the University of Florida as assistant professor of obstetrics and gynecology and director of the program in experimental medicine. After two years he returned to Duke, as Associate Professor of Ob-Gyn and Assistant Professor of Anatomy and Head of the Division of Gynecologic Endocrinology. In 1969 he went to the University of Arizona to become Professor and Head of Obstetrics and Gynecology. In 1971 he was honored with the student body's award of Best Clinical Teacher.

DISTINGUISHED ALUMNI

Dr. Cluff served as Chairman of the Department of Medicine at the University of Florida College of Medicine for ten years before accepting a position in 1977 as vice-president with the Robert Wood Johnson Foundation in New Jersey. After receiving his bachelor's degree from the University of Utah, Dr. Cluff earned an M.D. from George Washington University in 1949. He spent the year 1950-51 as an assistant resident at Duke, followed by a second year of residency at Johns Hopkins. A specialist in allergies and infectious diseases, he served two years as a visiting investigator and assistant physician at the Rockefeller Institute for Medical Research before joining the Medical faculty at Johns Hopkins in 1954. At the time of this award, he was a consultant for the FDA, a member of the AMA's Residency Review Committee, and member of the Committee on Infections of the American Hospital Association, chairman of the Committee on Clinical Pharmacology and Therapeutics for the American College of Physicians, and president of the Infectious Diseases Society of America.

Leighton E. Cluff, M.D.

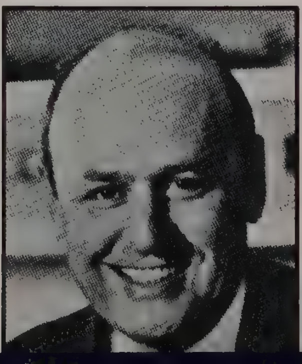
1971

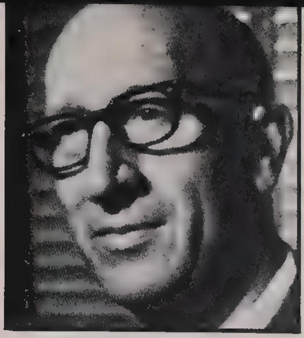
As Director of the National Library of Medicine, Dr. Cummings' job has been to determine the medical community's needs and to arrange a communications system to deliver this specialized information. This is provided through a massive, computer-based reference system (Med. Lit. Anal. and Retr. Sys.); the establishment of university research centers; a Community Medical Television Center, NLM-sponsored regional libraries. The publications of *Index Medicus, Current Catalog,* and specialized medical bibliographies; and the Interlibrary Loan Service.

Dr. Cummings has also worked for the USPHS and the VA directing tuberculosis research in Atlanta. In 1953 he was named Director of the VA Research Service; from 1959-61, he served as Chairman of the Department of Microbiology at the University of Oklahoma School of Medicine, and later worked for the NIH. He received the VA Exceptional Service and both the Superior Service and the Distinguished Award from the Department of Health.

Martin M. Cummings, M.D.

1969





1972

Cyrus Erickson, M.D.

Cyrus Erickson served on the Duke faculty from 1937 to 1950, as an instructor, associate and finally associate professor of pathology and as an associate pathologist at Duke Hospital. He has held position as professor of pathology, as director of the School of Cytotechnology, and as acting chairman of the Department of Pathology at the University of Tennessee College of Basic Medical Sciences.

Dr. Erickson received his undergraduate and medical education at the University of Minnesota and did an internship, residency, and fellowship at the University of Minnesota and Minneapolis General Hospital. In 1935 he moved to the University of Rochester Medical School as an assistant resident in pathology. Dr. Erickson has held numerous professional and scientific positions.

1979

Thomas B. Ferguson, M.D.

A native of Oklahoma City, Dr. Ferguson earned both his B.S.M. and M.D. degrees at Duke in 1947. Following internship in surgery at Duke 1947-48, he spent the next year at Harvard Medical School as a U.S. Public Health Service Fellow in Physiology. He returned to Duke as an assistant resident in surgery from July 1949 to December 1950, serving as an instructor in surgery throughout 1950. After two years in the U.S. Army he completed his surgical residency at Barnes Hospital in St. Louis, and in 1956 was appointed an instructor in surgery at Washington University School of Medicine. Since 1973, he has been Professor of Clinical Surgery in the Division of Cardiothoracic Surgery there. Ferguson is active in more than 20 professional organizations. He is a member of both Alpha Omega Alpha and Phi Beta Kappa. He has served as chairman of the board of the American Board of Thoracic Surgery and president of the Society of Thoracic Surgeons.

DISTINGUISHED ALUMNI

Dr. Hamrick was born in Boiling Springs, North Carolina. He graduated from Wake Forest College in 1944 and received his M.D. degree and membership in Alpha Omega Alpha from the Bowman Gray School of Medicine in 1946. As an intern Dr. Hamrick went to Barnes Hospital in St. Louis, Missouri then returned to Bowman Gray as an assistant resident in the Department of Pathology. During 1948-49 he served as the assistant chief of the Medical Service in the Tenth General Hospital, Manila, P.I. At the end of his military service, Dr. Hamrick returned to his home state as assistant resident in the Department of Medicine in Duke Hospital. In 1954 he joined Dr. Robert McWhorter in the practice of internal medicine in Concord, North Carolina. He has devoted much of his time since 1954 to medical programs in Cabarrus County and in North Carolina.

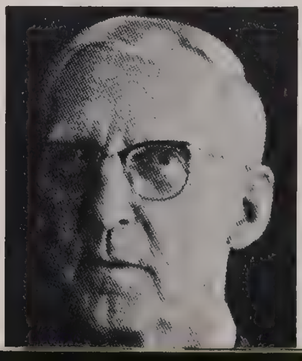
Ladd Hamrick, Jr., M.D.

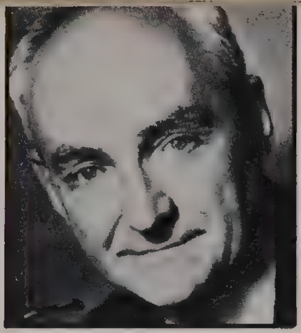
1970

Dr. Harrell is a unique man of medicine whose career has touched almost every facet of profession-physician, scientist, planner, educator, even architect. Dr. Harrell grew up in Asheville, N.C., and attended undergraduate and medical school at Duke. After five years as intern, resident and instructor at Duke, Dr. Harrell moved to Winston-Salem in 1941 as the first fulltime faculty member appointed to establish the Bowman Gray School of Medicine. In 1954 after being called in as a consultant for the establishment of a new medical school at the University of Florida, he was appointed dean to supervise the development of the school in Gainesville. He designed the medical sciences building. He remained at Florida until presented with the challenge to establish the new Hershey Medical Center. He was entrusted in 1964 with $50,000,000 and 100 acres of land to develop the Milton S. Hershey Medical Center of the University of Pennsylvania. He was also a member of the original planning committee which developed the medical program for the Oak Ridge Institute of Nuclear Studies and served on the agency's board of directors until he moved to Pennsylvania.

George Harrell, Jr., M.D.

1969

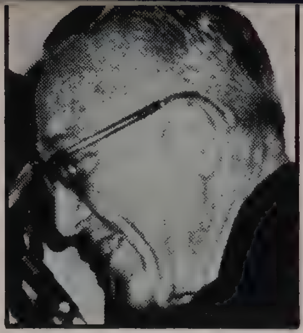




1972

W. Proctor Harvey, M.D.

Dr. Harvey who graduated from Duke Medical School in 1943 has been a professor of medicine at the Georgetown University School of Medicine and the director of the Division of Cardiology at the Georgetown University Hospital. He received his undergraduate education at Lynchburg College in Virginia and his M.D. at Duke. He went to Boston Massachusetts where he did an internship, fellowship, and a residency at Peter Brent Brigham Hospital. Dr. Harvey has been very active with the American Heart Association and many other organizations. With Dr. Samuel Levine, Dr. Harvey has authored two editions of the textbook, **Clinical Auscultation of the Heart.**



1971

Joseph Hiatt, Jr., M.D.

Dr. Hiatt is a graduate both of Duke's undergraduate college and medical school. After finishing medical school in December, 1939. He spent a two-month internship at the North Carolina Sanatorium, then returned to Duke Hospital as intern, assistant resident, and first assistant resident in medicine before entering Duke's 65th General Hospital of the Army Medical Corps in 1940. Following the war, Dr. Hiatt went back to the North Carolina Sanatorium as a resident physician, and remained on the staff there until 1953. He is a member of the Pinehurst Medical Clinic with four other physicians, specializing in internal medicine and diseases of the chest. He is a member of several state and national health and professional organizations.

DISTINGUISHED ALUMNI

The first woman to receive one of the Distinguished Duke Medical Alumni Awards, Dr. Howell was chairwoman of the pediatric department at the Medical College of Pennsylvania. She was born in Brooklyn, received her B.A. from Park College in Parkville, Missouri, and graduated from McGill University Medical School in 1949. After interning at the Children's Memorial Hospital in Montreal, Canada, she came to Duke University in 1951 as a senior assistant resident in pediatrics. In 1952, Dr. Howell went to Boston as a research fellow in hematology at Harvard. She became assistant physician and assistant hematologist to Dr. Louis K. Diamond. In 1955, she returned to Duke and served as a pediatric hematologist for eight years. She left in 1963 to become Chairwoman of Pediatrics at the Medical College of Pennsylvania. She is a member of the Alpha Omega Alpha Honorary Society for Pediatric Research and was listed in Who's Who in American Women.

Doris A. Howell, M.D.

1970

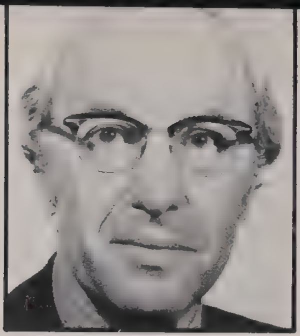
Dr. Ingram, M.D. '43, Chairman of Obstetrics and Gynecology at the University of South Florida at the time of this award, was in private OB-GYN practice for 20 years in his hometown of Tampa before returning to teaching and to a position as chief of OB-GYN at Tampa General Hospital. Ingram, who completed internship and residency in gynecology at Johns Hopkins and a residency in OB-GYN at Duke, is a diplomate of the American College of Obstetrics and Gynecology and a member of the Florida Medical Association Board of Governors. A specialist in pregnancy and maternal health, Ingram served as chairman for the Florida Medical Association's committee on Medical Health and the maternal mortality survey.

James M. Ingram, M.D.

1976

1977
Henry Izlar, Jr., M.D.

H. LeRoy Izlar, Jr. was born in Winston-Salem. He received both his bachelor's degree ('46) and his M.D. ('48) from Duke University. After an internship in internal medicine and cardiology at Vanderbilt and a residency at Bowman Gray School of Medicine, he returned to Duke in 1952 for a junior-senior residency and a cardiovascular fellowship. Dr. Izlar has been in private practice here in Durham. In addition, he has been a member of the Duke School of Medicine faculty and was appointed to the Board of Trustees of the Durham County Hospital Corporation.



1975
Nathan Kaufman, M.D.

Dr. Nathan Kaufman returned to Canada as Chairman of Pathology at Queen's College, Kingston, Canada. He was a former Professor of Pathology at Duke from 1960-1967. A native of Canada, Dr. Kaufman received his B.S. and M.D. at McGill University in Montreal and interned at the Royal Victoria Hospital from 1941-42. He served residencies at Jewish General Hospital there and at Cleveland City Hospital.

From 1948, when he completed his residency, until 1960, Dr. Kaufman also taught pathology at Western Reserve Medical School in Cleveland, then after seven years at Duke, returned to Canada and his appointment. While at Duke, he was consulting pathologist at the Veterans Hospital and director of graduate studies in the Pathology Department for two years. A diplomate of the American Board of Pathology and fellow with the Royal College of Physicians and Surgeons in Canada, Dr. Kaufman has served as president of the Cleveland Society of Pathologists, the International Academy of Pathology, U.S.-Canadian Division; and as Chairman of the Association of Chairmen of Pathology.

DISTINGUISHED ALUMNI

Dr. Kernodle was born in Burlington, North Carolina, where he lives and practices medicine. He received his B.A. in 1935 from Elon College, and his M.D. in 1942 from Duke University. During the next two and one-half years at Duke, he interned in pathology and then in obstetrics and gynecology, serving at the same time as an instructor in the medical school. Following World War II, he returned to Duke as assistant resident, then resident in obstetrics and gynecology under Dr. Bayard Carter. Together with Dr. Kenneth Cuyler, Dr. Kernodle established the first cytology laboratory in North Carolina in the Duke Department of Obstetrics and Gynecology. Notably, he helped organize the Bayard Carter Osbtetrical and Gynecological Society at the University of North Carolina at Chapel Hill.

John Kernodle, M.D.
1970

Chairman of the Department of Internal Medicine at the Washington School of Medicine and physician-in-chief at Barnes Hospital in St. Louis, Dr. Kipnis is also director of the Lipid Research Clinic at Washington University. He has his Bachelor's and Master's degrees from Johns Hopkins and his M.D. from the University of Maryland School of Medicine. He was a junior and senior assistant resident at Duke Hospital in 1952-54. A specialist in diabetes, Dr. Kipnis has been at Washington University since going there on a research fellowship in 1955. He has been editor of the journal *Diabetes* since 1973.

David M. Kipnis, M.D.
1976

1971
Lyndon Lee Jr., M.D.

Dr. Lyndon E. Lee, Jr., Assistant Chief Medical Director for Professional Services of the United States Veterans Administration, joined the V.A. at its Washington, D.C. office in 1957. He received his B.S. degree from Duke in 1937 and his M.D. in 1938, then received a twenty-four month National Research Council fellowship under which he studied the use of morphine and synthetic narcotics in surgery and cases of chronic pain. His next five years were spent as an instructor in surgery and instructor in pharmacology at the University of Michigan, then came two years on loan from Michigan teaching in the Tennessee State Medical Association's Graduate Education Program. From 1949 to 1954, again on leave from Michigan, Dr. Lee was in Puerto Rico, initiating a cancer control program in the Puerto Rico Department of Health and coordinating cancer teaching as a professor at the University of Puerto Rico Medical School. He returned to Michigan for three years in 1954, then moved to Washington and the V.A. as Coordinator of Research in Surgery.

1975
Arthur London, Jr., M.D.

Born in Pittsboro, North Carolina, Dr. Arthur H. London, Jr., received his B.S. degree from the University of North Carolina in 1925 and two years later took an M.D. from the University of Pennsylvania. He interned at the Methodist Hospital in Philadelphia, completed an assistant residency in pediatrics at Children's Hospital in Cincinnati, and returned to Philadelphia Children's Hospital as chief resident in pediatrics. In 1930 Dr. London returned to Durham and began working at Duke's pediatric clinic. He became Chief of Pediatric Service at Watts Hospital in Durham and later established the Child Care Center. Dr. London taught clinical pediatrics at the UNC medical school and was Emeritus Clinical Professor of Pediatrics, as well as consultant and lecurer to the pediatric department at Duke medical school. He was also a former district chairman of the American Academy of Pediatrics. The pediatric clinic library at UNC is named in his honor.

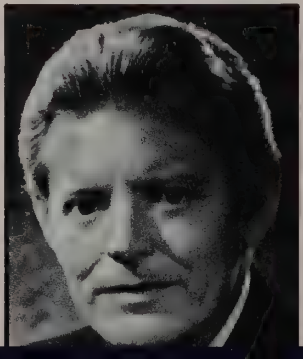
OUTSTANDING ALUMNI

Born in the Blue Springs community in Robeson County, North Carolina, Dr. McBryde attended Davidson College and received the B.S. degree from there in 1924. From Davidson he went on to the Medical School of the University of Pennsylvania, earning the M.D. in 1928, and remained in Philadelphia for two more years of internship and assistant residency in pediatrics at the university hospital. In 1930 he went to Baltimore and assistant residency at the Johns Hopkins Hospital, then a year later came home to North Carolina. Dr. McBryde taught in Duke's Medical School from 1931 until his retirement, and served as director of nurseries at the Medical Center from 1932 to 1966. He was the originator of the annual newborn symposium at Duke.

Angus McBryde, M.D.
1973

Director of the McGovern Allergy Clinic in Houston. Dr. McGovern holds multiple appointments at the Baylor College of Medicine and at the University of Texas Graduate School of Biomedical Sciences. McGovern, who has his bachelor's degree ('42) and M.D. ('45) from Duke, serves at Baylor as Clinical Professor of Pediatrics, director of the allergy fellowship training program, and director of the Department of Microbiology's allergy research laboratory; he serves at UT as Clinical Professor of Allergy and Professor and Chairman of the History of Medicine Department. Also in Houston, he is a consultant to Texas Children's Hospital, Herman Hospital, and St. Luke's Episcopal Hospital. He is president of the Houston Allergy Society, the American Osler Society, and the Texas Allergy Research Foundation. Dr. McGovern is a member of the Davison Club of the Duke Medical Center.

John P. McGovern, M.D.
1976



1972
Henry McIntosh, M.D.

Dr. Henry McIntosh, a native of Gainesville, Florida, is a 1943 graduate of Davidson College and a 1950 graduate of the University of Pennsylvania Medical School. Dr. came to Duke as an intern in medicine in 1950. He did a fellowship in cardiology at Duke. Dr. McIntosh completed his residency at the VA Hospital in Durham, then returned to Duke in 1954 as an Instructor in medicine. After eight years on the Duke faculty, he was made a professor of medicine in 1962, and from 1966 until 1970 he held to position of Chief of the Cardiology Division at Duke Medical School. Dr. McIntosh moved to Houston, Texas in 1970 to assume the position as chief of medical services at The Methodist Hospital and as a Professor and Chairman of the Department of Medicine aty Baylor College of Medicine.

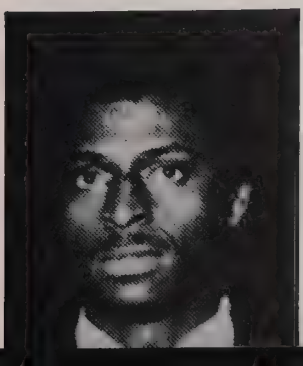
1979
Dean T. Mason, M.D.

Author of more than 650 original articles on several aspects of cardiovascular science and clinical cardiology, Dr. Dean T. Mason also has published more than 900 preliminary communications of his research investigations. Mason is Professor of Medicine and Physiology and Chief of Cardiovascular Medicine at the Unviersity of California School of Medicine, Davis, and the University of California at Davis-Sacramento Medical Center. He came to his present position in 1968 from the National Heart Institute at the NIH in Bethesda, Md., where he had been attending physician and senior investigator and assistant section director of cardiovascular diagnosis in the Cardiology Branch since 1963. A native of Berkeley, Calif., Mason graduated from Duke's School of Medicine in 1958. After completing his medical training on the Osler service at The Johns Hopkins University Hospital in Baltimore in 1961, he was named clinical associate at NIH. He serves on many editorial boards. Mason is author of the Textbooks *Congestive Heart Failure, Advances in Heart Disease* and *Cardiac Emergencies.*

DISTINGUISHED ALUMNI

Dr. Meriwether was presented the J.D. Lane Award of the USPHS for his work on "Inhibition of DNA and RNA Synthesis by Daunorubicin and Adriamycin in L-1210 Mouse Leukemia." An outstanding research physician, he has been a White House Fellow serving as special assistant to the Secretary of Health Education and Welfare. He attended medical school under a Sloan Foundation fellowship and, in addition to the Lane Award, has had his research work honored by the Student Research Forum of the University of Texas and the Columbus Society of Internal Medicine. A native of Nashville Tennessee, Dr. Meriwether attended Michigan State as an undergraduate and the Graduate Educational Program of the NIH in 1970-71. He completed internship at Pennsylvania and residency at Ohio State, then from 1969 to 1971 was a clinical associate of the National Cancer Institute. He has been a research fellow at Harvard Medical School and a clinical fellow at Boston City Hospital. He has taken active roles in a number of nationwide medical commissions and programs.

William Meriwether, M.D.
1974



Born in Smyrna, South Carolina, Dr. Benjamin Miller received the B.S. degree in medicine at Duke along with his M.D. in 1935. He has been president of both the Duke Medical Alumni Association and the General Alumni Association. Dr. Miller has held teaching positions at the Universities of Alabama and South Carolina. He is particularly active in the area of rehabilitation. He has been medical consultant to the South Carolina Vocational Rehabilitation Agency. He has a number of offices in various organizations. Dr. Miller resides in Columbia, South Carolina.

Benjamin Miller, M.D.
1973

1974
Beverly C. Morgan, M.D.

Ever since medical school, Beverly Carver Morgan, M.D. '55 has won honors. A **cum laude** graduate of the Medical School, she won the Mosby Scholarship Award and was elected to Alpha Omega Alpha. Dr. Morgan was named Chairwoman of the Pediatric Department at the University of Washington — the first woman to head a pediatrics department in the United States. She was also voted chief-on-staff.

Dr. Morgan attended the University of Wisconsin as an undergraduate, enrolled at the George Washington School of Medicine and transferred to Duke her second year. From Duke, she went to Stanford University Hospital as an intern then assistant resident. She spent four years at the Columbia Presbyterian Medical Center as a Clinical and research fellow in pediatrics and pediatric cardiology. In 1962 she moved to the University of Washington where she has been instructor, assistant, associate, and full professor.

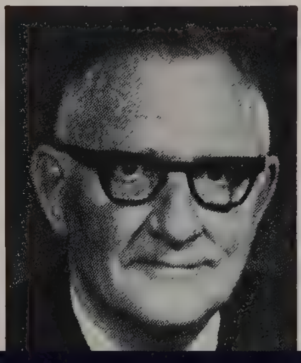
1969
William Muller, Jr., M.D.

Dr. William H. Muller, Jr., after graduating from Duke Medical School, began his advanced training in surgery as intern, resident and instructor at The Johns Hopkins Hospital. Following residencies in general and cardiovascular surgery, Dr. Muller moved to the University of California at Los Angeles School of Medicine in 1949 in thoracic surgery at Wadsworth Veterans Hospital. In 1954, Dr. Muller, only thirty-five years old, was named Stephen H. Watts Professor and Chairman of the Department of Surgery at the University of Virginia School of Medicine and Surgeon-in-Chief of the University Medical Center in Charlottesville, Virginia. He has held numerous prestigious positions. In 1966 the State of South Carolina honored him as one of its distinguished native sons.

DISTINGUISHED ALUMNI

An alumnus of the University of Wisconsin at Madison, Dr. Marc J. Musser was a professor of medicine at Duke Medical School from 1966 to 1970. He received both his A.B. and M.D. degrees from Wisconsin, in 1930 and 1934 respectively. During 1934-35 Dr. Musser did an internship at Kansas City General Hospital, then returned to Wisconsin General Hospital in Madison for a residency in internal medicine and neuropsychiatry. He was on the faculty of Wisconsin Medical School from 1938 to 1958, with position of professor of medicine from 1953. Dr. Musser has held the position of Chief Medical Director of the Veterans Administration Central Office in Washington, D.C. In 1959 he left Baylor to become Director of Research Service at the VA Central Office in Washington and from 1962-64 served as assistant chief medical director of the VA Central Office. Dr. Musser has written and edited a number of articles for publication and is active in a variety of professional societies.

Marc Musser, M.D.
1972



After attending four years at Phoenix Junior College and the University of Arizona, Dr. Jack Myers never received his degree. Not until entering Stanford University Medical School in 1932 did he receive his A.B.-one year later. He received his M.D. in 1936. From 1936-38 he did an assistant residency in medicine at Stanford and from there moved to Boston as a research fellow at Harvard Medical School. In 1940 he completed a second assistant residency and in 1942, a residency at Peter Brent Brigham Hospital. In the late forties Dr. Myers came to Duke. After holding an associate professorship for one year at Emory University Medical School, Dr. Myers came to Durham. He moved to Pennsylvania as Chairman of the Department of Medicine at the University of Pittsburgh. He has served on the editorial boards of several journals.

Jack D. Myers, M.D.
1975

1970
Hans Neurath, Ph.D.

Dr. Neurath began his professional career at the Institute of Colloid Chemistry at the University of Vienna where he taught as an Instructor in Medical Colloid Chemistry and received his Ph.D. in 1933. From Vienna he went to the University of London as a Postdoctoral Research Fellow in University College, and in 1935, immigrated to the United States. From 1938 to 1950 he served on the staff of the Department of Biochemistry at the Duke Medical School. In 1946 he became a professor of physical biochemistry. In 1950 he became Professor of Biochemistry and the Chairman of the Department of Biochemistry at the University of Washington in Seattle. He pioneered in the study of zymogenactivation and described the conversion of the inactive precursors into active enzymes, such as the conversion of pancreatic trypsinogen to trypsin. With G.W. Schwert and other co-workers, he discovered that proteolytic enzymes have esterase activity. Dr. Neurath is a member of many professional societies and organizations. He has been the editor of *The Proteins* and of the American Chemical Society's publications, *Biochemistry.*

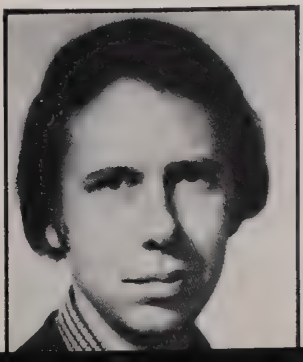
1978
Robert Purcell, M.D.

Dr. Robert H. Purcell received his B.A. degree from Oklahoma State University in 1957, an M.S. degree from Baylor University in 1960, and his M.D. degree from Duke University in 1962. While at Duke he served as a student fellow with Dr. Joseph Beard, followed by a year of internship in the department of pediatrics. After two years with the Communicable Disease Center in Atlanta, Dr. Purcell joined the staff of the Laboratory of Infectious Diseases (NIAID) in 1965 as senior surgeon. In 1972 he was appointed medical director of the Laboratory, and in 1974 assumed the position of head of the Hepatitis Viruses Section of the NIAID. During his three years there, Dr. Purcell's scientific research and leadership have resulted in a number of major advances in the field of viral hepatitis, and his achievements have made him an internationally known expert on one of the country's major health problems.

DISTINGUISHED ALUMNI

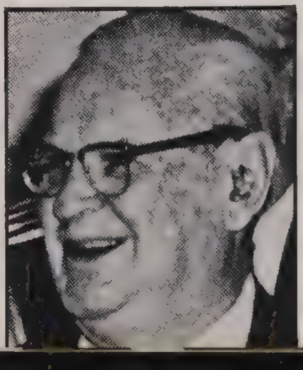
A native of Wilson, North Carolina, Dr. Charles C. Richardson received his B.S. degree in 1959 and the M.D. degree in 1960, both from Duke. Dr. Richardson remained at Duke following his graduation from medical school. During 1958-59 he did work as a special graduate student in the department of biochemistry and during 1960-61 completed his internship. From 1961-63 he worked as a postdoctoral fellow in the Department of Biochemistry at Stanford Unviersity Medical School. From Stanford he went to Harvard Medical School as an assistant professor of biological chemistry, and in 1969 became a professor of biological chemistry at Harvard. He is a member of several professional groups. Dr. Richardson's research interests center on the biochemistry of nucleic acids.

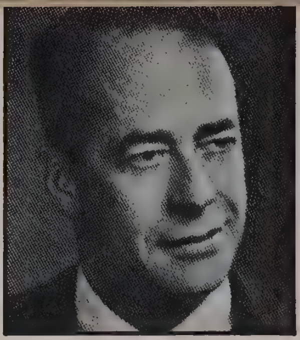
Charles Richardson, M.D.
1972



An alumnus of the University of North Carolina and Pennsylvania, Dr. Robert A. Ross spent twenty-two years of his career teaching in Duke's Department of Obstetrics and Gynecology. After taking his bachelor's degree at UNC in 1920 and his M.D. at Penn in 1922, the Morganton, North Carolina native came to Duke in 1930 with the opening of the Duke Medical School, and remained a part of the school until 1952 when he returned to Chapel Hill as Professor and Chairman of the Department of Obstetrics and Gynecology there. An Emeritus Professor and Chairman of Ob-Gyn at UNC, Dr. Ross maintained his record of activity within his profession and in other areas of science and health care until his death in 1973.

Robert Ross, M.D.
1971





1969
Paul W. Sanger, M.D.

Dr. Paul W. Sanger, a distinguished surgeon who pioneered the development of cardiovascular surgery in Charlotte, N.C., died September 9, 1968. Duke University Medical Alumni honored him posthumously as one of their most distinguished colleagues.

Dr. Sanger began his association with Duke after graduating from Vanderbilt University Medical School. From 1931 through 1937, he trained in surgery, with specific interest in thoracic surgery, under Dr. Deryl Hart. When he began his practice in Charlotte, he was the first specialist in the field of thoracic surgery, when he began to develop while working at the Mecklenburg Tuberculosis Sanatorium. He was early in the use of lobe and lung resection for various pulmonary diseases. In 1945, he organized the Thoracic and Cardiovascular Surgery Department at Charlotte Memorial Hospital and became the departmental chief. He established the Heineman Foundation Cardiovascular Research Laboratory where he proved the effectiveness of the dacron-orlon graft for vessel replacement.

1979
Emile Scarpelli, M.D.

Dr. Emile M. Scarpelli, Professor of Pediatrics at the Albert Einstein College of Medicine in New York, established the first children's intensive care unit managed by pediatricians and founded the school's Integrated Pediatric Allergy-Immunology-Pulmonary Program. He established AECM's first course in perinatal biology and medicine, was co-chairman of the First International Symposium on Survival in the Perinatal Period and served as senior editor for the inaugural issue of "Reviews in Perinatal Medicine." Scarpelli came to Duke in 1952 as a graduate student in physiology. He had earned a B.S. degree from Fordham University and joined the USAF Medical Corps in 1951. From 1952-56 he served as an Air Force aviation physiologist. At Duke, Scaprelli received his M.D. in 1959 and his Ph.D. in 1962. He joined Albert Einstein College of Medicine as an NIH research fellow in 1961, and was appointed research assistant professor and received a 10 year NIH Research Career Development Award. He is director of the Pulmonary Center for Infants and Children.

DISTINGUISHED ALUMNI

Since graduating from Duke University in 1942 and Duke Medical School in 1945, Dr. Schwartz has achieved national recognition as a scientific investigator, author, educator and physician. He became Chairman of the Department of Medicine, Tufts University School of Medicine and physician-in-chief of the New England Medical Hospitals in 1971. Dr. Schwartz has made extensive contributions in the fields of kidney, electrolyte and acid-base physiology. His finding that inhibition of carbonic anhydrase in the kidney promotes diuresis in the kidney led directly to the development of thiazides and other diuretics. He discovered the clinical entity of potassium-depletion nephropathy and first identified the syndrome of inappropirate secretion of antidiuretic hormone. Dr. Schwartz served his internship and residency at the University of Chicago Clinics. He was appointed a research fellow in medicine at Harvard and an assistant physician at Peter Brent Brigham from 1948 to 1950. He joined the faculty at Tufts and was promoted from Instructor to Professor of Medicine in eight years.

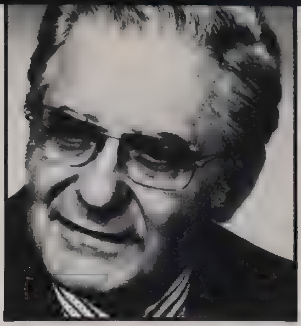
William Schwartz, M.D.
1970

Born in New Bern, North Carolina, Dr. Styron completed his undergraduate work at North Carolina State College, then graduated from Duke Medical School in 1938. He interned at Duke Hospital in 1938-39, and at Boston City Hospital in 1939-40. From 1940 to 1942, he was an Elliott P. Joslin Fellow in Medicine at New England Deaconess Hospital in Boston. He came home to North Carolina in 1946, and has been active in medical organizations of his state. He has been an associate in medicine at Rex Hospital in Raleigh and an Assistant Professor of Medicine at Duke.

Charles Styron, M.D.
1971

1973
Margaret Sullivan, M.D.

At the time of her award, a pediatrician at the University of Texas M.D. Anderson Hospital and Tumor Institute in Houston and Professor of Pediatrics in the Division of Continuing Education of the University of Texas Graduate School of Biomedical Sciences, Dr. Margaret Sullivan received the A.B. at Rice in 1944 and the M.D. at Duke in 1950. She interned at Duke Hospital in 1950-51 and was an assistant resident in pediatrics at Duke in 1951-52. She went to an assistant residency at the St. Louis Children's Hospital. A year later she went to Japan as a pediatrician with the Atomic Bomb Casualty Commission. She spent two years there then came back to Houston and began her association with M.D. Anderson Hospital and the University of Texas Medical School. Dr. Sullivan has numerous publications to her credit in the fields of pediatrics, hematology, and cancer research. In 1973 she was president-elect of the American Medical Women's Association.



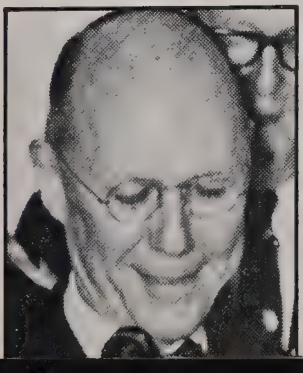
1978
A.J. Tannenbaum, M.D.

Dr. Jack Tannenbaum received his B.A. degree from Duke University in 1931 and his M.D. from Duke University School of Medicine in 1935. In 1935-37, he interned at St. Leo's Hospital and Gallinger Municipal Hospital in Greensboro, North Carolina, followed by six months of post-graduate medicine at the New York Postgraduate Hospital. During World War II, Dr. Tannenbaum served with the United State Army Medical Corps. After the war he returned to Greensboro and established a practice in internal medicine. He is an attending physician at Moses Cone Memorial Hospital. He is also a Clinical Assistant Professor Medicine with the Bowman Gray School of Medicine and a Clinical Associate Professor of Medicine with the University of North Carolina. He is a fellow of the American College of Cardiology. Dr. Tannenbaum is a charter member of the Davison Club.

DISTINGUISHED ALUMNI

Dr. James L. Tullis earned the M.D. at Duke in 1940, then served as intern and resident physician at Roosevelt Hospital in New York City. During World War II, he was attached to the Roosevelt Hospital Unit. In 1945 he went to Harvard Medical School as a research fellow in biochemistry. From 1951 to 1971 he was on the faculty of Harvard Medical School and has been senior investigator at the Protein Foundation, Inc. (now Blood Research Institute) since 1957 and director of the cytology laboratories of the Blood Research Institute. A contributor to various medical and scientific journals, Dr. Tullis has collaborated in the writing of several books.

James Tullis, M.D.
1971



Dr. John Victor Verner, Jr., entered Duke as an undergraduate after four years of duty with the army. He received an A.B. from Duke in 1950 and the M.D. degree in 1954. He was an intern, assistant resident and later chief resident in medicine, fellow of the American College of Physicians under Dr. Frank Engel and finally an associate in medicine — all at Duke. He also served a junior assistant residency at the University of Michigan School of Medicine. Dr. Verner has been in practice in Lakeland, Florida since 1962. He is a member of many professional organizations.

John Verner, M.D.
1972

1973
Salih J. Wakil, Ph.D.

Dr. Salih Wakil was named Professor and Chairman of the Marrs McLean Department of Biochemistry at the Baylor College of Medicine. Before joining the Baylor staff, Dr. Wakil had been professor of biochemistry at Duke since 1959.

Dr. Wakil received the B.Sc. degree in 1948 from the American University in Beriut, Lebanon, and the Ph.D. in 1952 from the University of Washington. While a member of the Duke faculty, he was recipient of the American Chemical Society Award in enzyme chemistry in 1967, and was awarded a John Simon Guggenheim Fellowship in 1968-1969 as visiting professor at the Pasteur Institute in Paris.

His major research interests are study of the mechanisms and control of fatty acid metabolism and the role of lipids in the structure and function of the membrane. He has published more than a hundred and thiry original and review articles on these and related subjects in prominent scientific journals.

1974
Lewis Wannamaker, M.D.

Dr. Lewis Wannamaker graduated from Emory University, received an M.D. in 1946 from Duke and served an internship at Duke Hospital. After completing a second internship in pediatric pathology at Boston's Children's Medical Center, Dr. Wannamaker finished an assistant residency in contagious diseases at Willard Parker Hospital of New York before appointment to Western Reserve University. In 1952 he moved to the University of Minnesota to become first Instructor, then Assistant, Associate and finally full Professor of Pediatrics and Microbiology at the University of Minnesota. With numerous scientific publications, Dr. Wannamaker has received numerous awards.

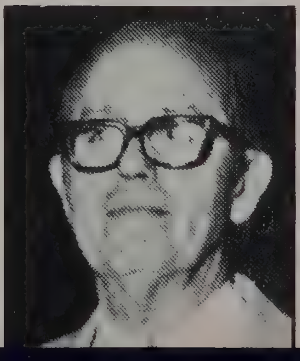
DISTINGUISHED ALUMNI

Dr. Warren attended Ohio State University and Harvard Medical School where he received his M.D. in 1939. He was a Research Fellow at Harvard and an assistant resident in medicine at Peter Brent Brigham. He taught at Emory as an instructor in medicine; then, after a year at Yale as assistant professor, returned to Emory as Associate Professor of Medicine, Professor of Physiology, and Chairman of the Department of Physiology. In 1951 he became Professor of Medicine and worked with Dr. Eugene Stead to produce a paper on congestive heart failure, notable as a turning point in the views on that subject. His group in Atlanta published the first report of the diagnostic use of cardiac catheterization. He and Dr. Weems, a radiologist at Emory, were among the first to use movies to record the x-ray image. He came to Duke in 1952 as a professor of medicine. In 1958 he became Professor and Chairman of the Department of Medicine at the University of Texas. In 1961 he moved to Ohio State College of Medicine as Chairman of the Department of Medicine.

James Warren, M.D.
1970

Earning the B.S. degree at Davidson in 1935, Dr. Weeks came to medical school at Duke and graduated in 1939. He served a two year internship here after receiving his M.D. He spent 1941-42 as assistant resident in pathology at Vanderbilt and returned as assistant resident in medicine for 1942-43 and became chief resident in medicine at Duke the following year. After World War II, he became associated with the Kornegay Clinic in Rocky Mount and undertook an instructorship in medicine at Duke. He has served in numerous prestigious positions in North Carolina.

Kenneth Weeks, M.D.
1974

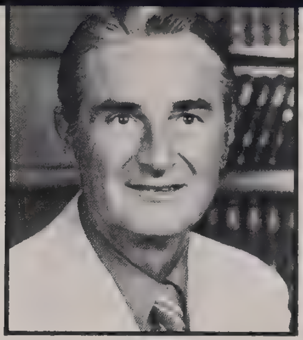


1977

Robert Windom, M.D.

Dr. Robert E. Windom resides in Sarasota, Florida where he has maintained a private practice in internal medicine and cardiology since 1960. He received the B.A. degree from Duke in 1952 and his M.D. from Duke in 1956. He interned at Parkland Memorial Hospital in Dallas, Texas, 1956-57, and was an assistant resident in internal medicine there from 1957-60. Dr. Windom now holds an appointment of Clinical Associate Professor of Internal Medicine at both the University of Miami and the University of South Florida.

He was elected president of the Florida Heart Association in 1972 and has also served as its secretary and a member of the association's Board of Governors. Dr. Windom is a former president of the Sarasota County Medical Society and of the Sarasota County Chamber of Commerce — the first medical doctor to hold the latter position. Dr. Windom is a diplomate of the American Board of Internal Medicine, and is a fellow of the American College of Physicians and the American College of Cardiology.



1980

John P. Collins, M.D.

Dr. John Collins received his A.B. and M.D. degrees from Duke in 1941 and 1944. He served an internship and residency in general and thoracic surgery at Duke Hospital 1944-52. He was Chief Surgeon at the Durham Veterans Administration Hospital 1953-1955 and Assistant then Associate Professor in Surgery at Duke University Medical School.

He moved to Lakeland, Florida in the practice of general and thoracic surgery. He is managing partner of the Watson Clinic in Lakeland. Dr. Collins has hospital positions at Lakeland General Hospital, South Florida Baptist, Bartow Memorial Hospital and Polk General Hospital. He is certified by the American Board of Surgery and the American Board of Thoracic Surgery.

Dr. Collins is a member of the American Medical Association, Florida Medical Association, American College of Surgeons and other professional societies. He has published a number of articles dealing with surgical problems. He has also held offices in civic organizations.

DISTINGUISHED ALUMNI

North Carolina certainly received a wonderful valentine some years ago when J.B. Warren chose that special day to make his worldly appearance! The Tar Heel State has enjoyed his contributions ever since. Following high school and three years in the Navy, Dr. Warren earned undergraduate and medical degrees at Duke. Since then he has offered his professional services in the family practice of medicine, first as an intern at Rex Hospital in Raleigh, then in private practice in Oriental (8 years) and New Bern (the last 20 years), N.C. He also is affiliated with Craven County Hospital. Beyond his practice, Dr. Warren has distinguished himself as first vice president, president-elect, and president of the N.C. Medical Society; president of the Northeastern N.C. Professional Standards Review Organization; past president of the Pamlico and Craven-Jones-Pamlico Medical Societies. Dr. Warren and his wife, Virginia, have reared a doctor and a nurse from their brood of three. What a fine legacy: a service career that stands on its own achievements and inspires such ambitions in the next generation!

Joseph B. Warren, M.D.

1980

Dr. Moseley, a native of Orangeburg, S.C., attended Clemson University and received his A.B. degree from Duke in 1933 and his M.D. from Duke in 1936. His internship was served 1937-38 at the N.C. State TB Hospital, Sydenham Hospital of Contagious Diseases and Duke Hospital. He completed his residency at Duke in 1938-39 and was a fellow in Dermatology and Syphilology 1939-1940. He was an Associate in Medicine and fellow in Gastroenterology at the University of Pennsylvania. He spent seven years as Chief of Medical Service in the U.S. Army.

Dr. Moseley went to the Medical University of South Carolina in 1947 as an Associate in Medicine and rose in two years to Professor of Medicine. He was a Co-Chairman of the Department of Medicine 1949-61. He also served as Dean of Clinical Medicine and as Chief of Medical Service at the V.A. Hospital at Charleston. He was the Assistant Academic Vice President for Extramural Affairs and Director of the Division of Continuing Education. The Vince Moseley Diagnostic Clinic, named in his honor, recognized his work with handicapped children. Dr. Moseley died in 1980.

Vince Moseley, M.D.

1980

HONORARY ALUMNI

John O. Blackburn
The Rev. James T. Cleland
John Alexander McMahon
I. Thomas Reamer
Henry E. Rauch
Mary D.B.T. Semans
Terry Sanford
R. Taylor Cole
Frank T. de Vyner
Marcus E. Hobbs
Douglas Knight

DISTINGUISHED SERVICE AWARD

Jeane Embrey Frazer
Grizzelle Mitchell Norfleet
Betty Dumaine

Golden Apple Awards

Basic Science		Clinical Science		Housestaff	
1963	Joseph Markee	1963	Eugene Stead, Jr.	1963	Fred Schoonmaker
1964	Charles Mengel	1964	F. Bayard Carter	1964	James J. Morris
1965	D.C. Hetherington	1965	George Baylin	1965	Bruniledo Herrero
1966	Talmage Peele	1966	E. Harvey Estes	1966	Earl Metz
1967	Suydam Osterhout	1967	Harold Silberman	1967	Robert Schwartzman
1968	Jacinto Vazquez	1968	Wendell Rosse	1968	John Douglass
1969	William Bradford	1969	Samuel Katz	1969	Raymond Ford
1970	Bernard Fetter	1970	Stanley Appel David Sabiston	1970	H. Preston Boggess Samuel Wells, Jr.
1971	Matthew Cartmill James Shafland	1971	Donald Silver	1971	Bruce Dixon
1972	Norman Conant	1972	Lois Pounds	1972	Harland Giles
1973	Donald Hackel	1973	Shirley Osterhout	1973	Andrew Wechsler
1974	Robert Hill	1974	Catherine Wilfert	1974	Charles Scoggin
1975	Stephen Vogel	1975	Bruce Dixon	1975	Michael Fried
1976	William Hylander	1976	Adhemar Renuart	1976	Mitchell Freedman
1977	Bernard Fetter	1977	David Sabiston	1977	Linda Clayton
1978	Peter Burger	1978	Samuel Katz	1978	Ralph Corey
1979	Donald Hackel	1979	Steven Osofsky	1979	Michael Freemark
1980	Salvatore Pizzo	1980	Roy T. Parker	1980	Kenneth Fortier

DISTINGUISHED TEACHING AWARD

George J. Baylin

Dorothy Beard

Joseph W. Beard

J. Lamar Callaway

John Dees

Susan C. Dees

John W. Everett

Clarence E. Gardner, Jr.

Thomas D. Kinney

Elijah E. Menefee, Jr.

Guy L. Odom

Edward S. Orgain

Talmage L. Peele

Kenneth L. Pickrell

R. Wayne Rundles

David T. Smith

Eugene A. Stead, Jr.

THOMAS D. KINNEY AWARD

David C. Sabiston, Jr.

Suydam Osterhout

Wendell F. Rosse

Dennis Bernard Amos

Renowned for his research and writing in organ transplants, Dennis Amos has received worldwide recognition for his work in developing the concept and reality of tissue antigens. His research has provided an important part of the scientific background for organ transplantation.

A native of England, Professor Amos received his M.D., B.S., and M.D. degrees from Guy's Hospital in London. Following several years as a research fellow in pathology at Guy's Hospital, he continued his work in cancer research at Roswell Park Memorial Institute in Buffalo, New York. Dr. Amos came to Duke in 1962 as Professor of Immunology and Associate Professor of Experimental Surgery.

George J. Baylin

Professor of Radiology and Otolaryngology, Dr. Baylin is a graduate of Duke University Medical School and holds an A.B. degree from The Johns Hopkins University. He served as an intern at Sinai Hospital in Baltimore, was a fellow at Guy's Hospital in London and at the Karolinska Institute in Stockholm, and completed a residency in radiology at Duke Hospital. A member of the Duke faculty since 1935, Dr. Baylin has taught anatomy, radiology, and otolaryngology and was Chairman of Duke's Cancer Operational Committee. His latest appointment was in 1977, as the R.J. Reynolds Professor of Medical Education.

Dr. Baylin's research interests in radiology are varied and were recognized in 1950, when he received the N.C. Medical Society's Gold Award for Research. He is an active member of a number of professional societies including the American College of Radiologists, the N.Y. Academy of Science and the N.C. Radiological Society (Chairman, 1958). For excellence in teaching he received the SAMA Golden Apple Award in 1965, and he was also honored by the Duke medical alumni as recipient of the Distinguished Alumni Award.

DISTINGUISHED PROFESSORS

Dr. Buckley received the A.B. degree from Duke University and the M.D. degree from the University of North Carolina. She then returned to Duke for her internship and residency in pediatrics, followed by fellowship training in both allergy and immunology. She is now Professor of Pediatrics and Immunology and Chief, Division of Pediatric Allergy, Immunology, and Pulmonary Diseases. She is also Director of Duke's Asthma and Allergic Diseases Center.

Professor Buckley currently is the first woman president and a fellow of the American Academy of Allergy; she has also served as President of the Southern Society for Pediatric Research and of the Southeastern Allergy Association.

In addition to membership on several editorial boards, Dr. Buckley has been author or coauthor of over seventy-five articles or chapters in books and many published abstracts.

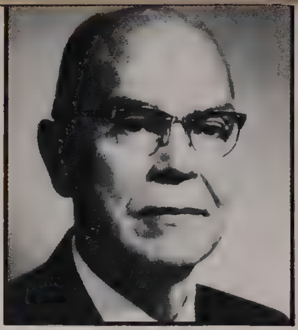
Dr. Rebecca H. Buckley

Associate Provost and Dean, Medical and Allied Health Education, Duke University Medical Center, since 1974, Ewald W. Busse joined the Duke faculty as Chairman of the Department of Psychiatry in 1953, a position he held for twenty-one years. In 1965, he was named J.P. Gibbons Professor of Psychiatry. He has held numerous positions within the Medical Center including that of Chief of Staff.

Dr. Busse was founding director of the Duke University Center for the Study of Aging and Human Development, a position he held from 1957-1970.

Dr. Busse earned his B.A. degree at Westminster College which awarded him the Sc.D. degree in 1960, and his M.D. degree at Washington University in St. Louis. His psychiatric training was at the University of Colorado Medical Center.

Ewald W. Busse



J. Lamar Callaway

Jasper Lamar Callaway, a member of the first graduating class of the new Duke University School of Medicine, did his training at Duke. After a brief absence from Duke, he became a Professor of Internal Medicine and Chief of the Division of Dermatology in 1937. In WW II, due to his national reputation in dermatology and syphilology, his expertise was sought by the V.A., U.S./Public Health Service, and the Secretary of War. He has continued his distinguished career, serving as National Consultant in Dermatology to the Surgeon General and as a member of several councils, including the National Serology Advisory Council and the Special Advisory Group on Dermatology to the V.A.

Joint author of three textbooks, Dr. Calloway has also published numerous articles based on his extensive research. His numerous honors include the James B. Duke Professor of Dermatology, the establishment of a chair in his name — the J. Lamar Callaway Professor of Dermatology — and the Distinguished Teaching Award from Duke's Medical Alumni Association.

M.C. Crenshaw, Jr.

M. Carlyle Crenshaw, Jr. has been on the faculty of Duke University since 1964 and now holds joint appointments as Professor of Obstetrics and Gynecology and Associate Professor of Pediatrics. Currently he is Chief of the Division of Perinatal Medicine in the Medical Center.

A native of Lancaser, South Carolina, Dr. Crenshaw graduated **cum laude** from Davidson College and was awarded the M.D. degree by Duke University in 1956. After interning in medicine at Duke Medical Center, he served as a resident in obstetrics and gynecology at Duke. Following two years with the Air Force, he did postdoctoral training in maternal and fetal physiology at Yale University School of Medicine. He has been a visiting professor at the University of Dundee, Scotland and a visiting scholar in the Physiological Laboratory, Cambridge University.

DISTINGUISHED PROFESSORS

After receiving his B.S. degree at the City College of New York and serving for a year as Research Associate in the Department of Medicine of Cornell Medical College, Dr. Fridovich continued his studies at Duke where he received his Ph.D. degree in biochemistry. He served for a year as visiting research associate at Harvard and has been on the Duke faculty since 1958. He has served as Director of Graduate Studies for his department and as Associate Director of the Medical Scientist Training Program at Duke. In 1976 he was named a James B. Duke Distinguished Professor of Biochemistry.

Author or coauthor of over 170 original research papers and numerous review articles, Professor Fridovich has also served on the editoral boards of the *Journal of Biological Chemistry, Archives of Biochemistry and Biophysics,* and *Life Sciences.* His professional society memberships include the N.C. Academy of Sciences, the American Society of Biological Chemists, the American Chemical Society and the American Academy of Arts and Sciences.

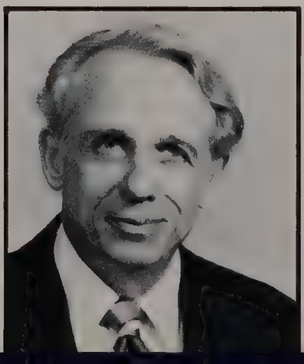
Irwin Fridovich

Professor and Chairman of the Division of Orthopaedic Surgery, Dr. Goldner joined the Duke staff in 1950. His major interest was reconstructive musculoskeletal surgery through which he advanced treatment of the injured hand and became a recognized authority in this field. He served as President of the American Society for Surgery of the Hand in 1969 and is currently a member of the Educational Commitee of that society.

Dr. Goldner received his undergraduate education at the University of Minnesota, his M.D. degree from the University of Nebraska, was an officer in the United States Navy for three years, and completed his orthopaedic training at Duke from 1946 to 1950.

He is author or coauthor of over 100 articles and chapters of books and participates regularly in education programs related to medical education, medical-legal problems, and musculoskeletal conditions.

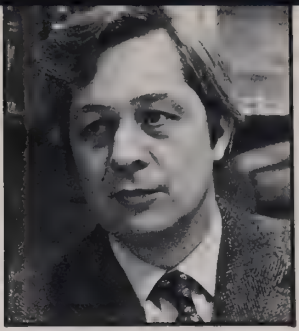
J. Leonard Goldner



Philip Handler

Philip Handler, Chairman of the Department of Biochemistry from 1950-1969, has published numerous research papers in such areas of biochemistry as niacin deficiency, renal hypertension, amino acid and coenzyme metabolism, the mechanisms of biological oxidations, and the biochemistry of evolution. He is well known as co-author of *Principles of Biochemistry.*

Born in New York City, Professor Handler received his B.S. from the College of the City of New York and his Ph.D. from the University of Illinois. He has been at Duke University since 1939. In 1959, he founded the Research Training Program for Clinical Investigators, a widely acclaimed venture which involves the cooperation of several academic departments and a special group of medical faculty; this program was a forerunner of the current medical curriculum at the University. He is currently on leave from the University to serve as President of the National Academy of Sciences.



Robert L. Hill

Professor Hill holds an A.B., an M.A., and a Ph.D. from the University of Kansas and taught at the University of Utah after holding a postdoctoral fellowship at that institution. He joined the Duke Department of Biochemistry in 1961, became chairman of the department in 1969, and was selected as a James B. Duke Professor in 1974.

In his major field of research, the relationship between the structure and function of proteins, Dr. Hill has been the author or co-author of more than a hundred articles and thirty postdoctoral students have received training in his laboratory. He has been co-author of two textbooks.

Active in professional societies, he has held several positions in the American Society of Biological Chemists and was president in 1976-77. He is a member of the National Academy of Sciences, the Institute of Medicine, and is a Fellow of the American Academy of Arts and Sciences.

DISTINGUISHED PROFESSORS

After receiving the M.D. degree from the University of Sheffield, Dr. Johnson, a native of England, joined the faculty of the University of Sydney in the Department of Pharmacology. In 1965 he came to Duke as Associate Professor and Chief of the Laboratory of Cardiac Cellular Physiology. Presently he is Chairman of the Department of Physiology.

Dr. Johnson is a member of several professional societies including both the American and Australian Physiological Societies, the Biophysical Society, the Society of General Physiologists, and the Society of Cell Biology.

A widely known writer, he has been author or co-author of over sixty research articles or chapters in books and more than fifty printed abstracts and communications. His honors in the field of academics include the Peter Bancroft Prize for Best Research in Medical Science in the University of Sydney (1960) and the James B. Duke Professor of Physiology (1979).

Edward Anthony Johnson

Dr. Joklik has served as President of the Virology Division of the American Society for Microbiology and as a member of the Advisory Council, Section of Virology, International Association of Microbiological Societies.

In addition to being author or co-author of approximately 150 scientific papers and abstracts, Professor Joklik is the senior author of Zinsser's *Microbiology,* the standard text in the field. He is also editor-in-chief of *Virology.*

A native of Austria, Wolfgang Karl Joklik became a citizen of Australia, where he completed the bachelor and master of science degrees in biochemistry at the University of Sydney. His doctoral degree from Oxford is in virology. He has held positions as Fellow at the Australian National University, the University of Copenhagen, and the Laboratory of Cell Biology at the National Institutes of Health. He came to Duke in 1968 as Chairman of the Department of Microbiology and Immunology from the Siegfried Ullman Professorship of Cell Biology at the Albert Einstein College of Medicine.

Wolfgang K. Joklik

Samuel L. Katz

An authority in the field of infectious diseases and pediatrics, Samuel Lawrence Katz has been Chairman of Duke's Department of Pediatrics cinse 1968. He was born in New Hampshire and holds the A.B. degree from Dartmouth College and the M.D. from Harvard. His internship, residency, and research fellowship were in several Harvard hospitals and at St. Mary's Hospital Medical School in London. Before coming to Duke, he was on the faculty of the Harvard Medical School and the Children's Hospital Medical Center in Boston.

Professor Katz has been a Research Fellow of the National Foundation for Infantile Paralysis and was given a Research Career Development Award by the National Institute of Allergy and Infectious Diseases. He is author or coauthor of more than eighty articles and several books dealing with infectious diseases, especially those of viral origin. Working with Nobel laureate Dr. John F. Enders, he developed the measles vaccine which has been used throughout the world to reduce the frequency of that infection in infants and children.

Gerald S. Lazarus

Professor Lazarus is a graduate of Colby College and the George Washington University School of Medicine. After residency in internal medicine at the University of Michigan Medical Center, he had dermatological training at Harvard and the Massachusetts General Hospital. His research training included time at the National Institute of Health and as visiting scientist at the Strangeways Laboratories at Cambridge. Prior to coming to Duke in 1975 as Professor of Medicine and Chief of the Division of Dermatology, he was Associate Professor of Medicine and Co-chairman of the Division of Dermatology.

Dr. Lazarus, whose major research interest in proteinase metabolism, is associate editor of the *Journal of Investigative Dermatology*. He has been the author of more than 50 articles in his field and he has just completed a book on dermatological diagnosis.

DISTINGUISHED PROFESSORS

In 1977, Professor Guy L. Odom received the Distinguished Teaching Award from the Duke Medical Alumni Association. He has also been visiting professor of neurological surgery at a number of institutions in the United States and Canada.

Dr. Odom, a member of the Duke faculty since 1943, is a graduate of Tulane University Medical School and had additional training in neurosurgery at the Montreal Neurological Institute. Prior to joining the Duke faculty, he was an Instructor in Neurosurgery at Louisiana State University.

Dr. Odom has been the coauthor of numerous professional articles and chapters in textbooks and in 1978, received the Distinguished Service Award from the Society of Neurological Surgeons. Earlier the American Academy of Neurological Surgery and the American Board of Neurological Surgery had made similar awards to him.

Guy L. Odom

Roy T. Parker came to Duke for his residency in obstetrics and gynecology in 1946 and joined the faculty in 1955 as an assistant professor. He was appointed Professor in 1963 and Chairman of the Department of Obstetrics and Gynecology in 1964.

Dr. Parker has made many contributions to medical literature in OB/GYN, particularly in the area of female cancer. He is a member of many editorial boards and has been president of several professional societies, including the American Assoc. of OB/GYN (1978), American College of OB/GYN (1978), S. Atlantic Assoc. of OB/GYN (1980). In 1980 he was presented the Golden Apple Award by the students for excellence in teaching the clinical sciences.

A native of North Carolina, Dr. Parker was graduated with an A.B. degree from the University of North Carolina and with an M.D. from the Medical College of Virginia with Alpha Omega Alpha honors. Dr. Parker did his internship at the United States Naval Medical Center, Bethesda, Maryland, and served in the Navy Medical Corps during World War II and during the Korean crisis.

Roy T. Parker

J. David Robertson

A graduate of the University of Alabama where he also started his study of medicine, Professor Robertson received his M.D. degree from Harvard. Following and internship, he continued work at the Massachusetts Institute of Technology, and was awarded a Ph.D. in biochemistry from that institution.

After serving as Assistant Professor of Pathology and Oncology in the medical school of the University of Kansas, Dr. Robertson engaged in research activities at University College in London and at McLean Hospital in Massachusetts. In 1960, he joined the faculty of Harvard Medical School as an Assistant Professor of Neuropathology and left as an Associate Professor to come to Duke as Professor and Chairman of the Department of Anatomy.

He has been author or coauthor of many articles and abstracts and has published a textbook. He is a member of numerous professional societies.

Roscoe R. Robinson

Dr. Robinson has combined a distinguished career in medicine with his position as Associate Vice-President for Health Affairs and Chief Executive Officer since 1976 of Duke Hospital. After receiving his B.S. degree from Central State University in his home state of Oklahoma, he earned his M.D. degree at the University of Oklahoma. Following a residency at Duke and a year at Columbia-Presbyterian Medical Center in New York, Dr. Robinson returned to Duke as Chief Resident in Medicine and then served two years as captain and chief of the renal unit at the Wilford Hall USAF Aerospace Medical Center in Texas.

Returning to Duke as an associate in medicine and a clinical investigator at the V.A. Hospital, he is now Director of Duke's Division of Nephrology. Professor Robinson has been author or coauthor of over a hundred articles on nephrological problems and has contributed and edited sections on his specialty for several medical textbooks.

DISTINGUISHED PROFESSORS

Dr. Sabiston, Professor and Chairman of the Department of Surgery at Duke since 1964, graduated from the University of North Carolina at Chapel Hill and received the M.D. Degree from The Johns Hopkins University where he also served an internship and residency. This training was followed by service as a captain in the U.S. Army Medical Corps. He returned to the faculty at Johns Hopkins and was successively promoted to the rank of Professor of Surgery.

Author or coauthor of more than 200 scientific articles, Dr. Sabiston is editor of the *Textbook of Surgery* and coeditor of Gibbon's *Surgery of the Chest.* He is chairman of the editorial board of *Annals of Surgery* and a member of the editorial boards of the *Journals of Thoracic and Cardiovascular Surgery,* the *Annals of Clincal Research,* the *Archives of Surgery,* and the *World Journal of Surgery.* Other positions and honors include a Fulbright Research Scholarship, a Career Research Award from NIH, president of the American Surgical Association, and chairman of the American College of Surgeons' Board of Governors.

David C. Sabiston, Jr.

Knut Schmidt-Nielsen was born in Norway, earned his Ph.D. degree at the Univ. of Copenhagen, and came to Duke in 1952. He has led scientific expeditions and conducted research in Africa, Asia, Australia, and South America. His work includes studies of heat and water balance in the camel and other desert animals and the water economy and salt metabolism of marine birds. He has received grants from several government agencies, and since 1964, he has been the recipient of a Research Career Award from NIH.

Dr. Schmidt-Nielsen has been a speaker at many international symposia and a consulted to both the NIH and the NSF. In 1957, he received the Poteat Award from the North Carolina Academy of Science. In 1962, he was the Brody Memorial Lecturer at the Univ. of Missouri and the Harvey Society Lecturer in New York; in 1963, the Regents' Lecturer at the Univ. of California; in 1971, the Hans, Gadow Lecturer at Cambridge Univ.; and in 1972, Visiting Agassiz Professor at Harvard. He is a member of the American Academy of Arts and Sciences, the National Academy of Sciences, the Royal Norweigian Academy, and the Royal Danish Academy.

K. Schmidt-Nielsen

W.W. Shingleton

After receiving an A.B. degree from Atlantic Christian College, Dr. William W. Shingleton completed an M.D. degree at the Bowman Gray School of Medicine. At Oak Ridge he took a three month's course on "Techniques and Uses of Radioisotopes." He then did his residency at Duke, and in 1951 became an associate in surgery here. He was made Professor of Surgery in 1959. Currently he is Chief of the General Surgery Division and foundations director of Duke's Comprehensive Cancer Center.

Internationally know for his work in cancer research, Professor Shingleton heads the Duke University Clinical Cancer Education Program and is Chairman of the Cancer Control and Rehabilitation Advisory Committee of NCI. He is also a member of the Commission on Cancer of the American College of Surgeons, the International Union Against Cancer, and the National Cancer Advisory Board. He has served as both President and Chairman of the Board of the Association of American Cancer Institutes. He is author or coauthor of over eighty professional articles and chapters in books on general surgery and cancer.

Madison S. Spach

Coauthor of over 150 scientific papers and published abstracts, Professor Spach has been on the Duke faculty since 1957 and is now Chief, Division of Cardiology in the Department of Pediatrics and Professor of Physiology.

A fellow of the American College of Cardiology, he is also a member of a number of other professional societies including the New York Academy of Sciences, the Association of European Pediatric Cardiologists, the American Academy of Pediatrics, and the Society for Pediatrics for which he served as president in 1971. Dr. Spach has also served his profession as a member of the editorial boards of several professional Journals and as a committee member for several groups in pediatric cardiology.

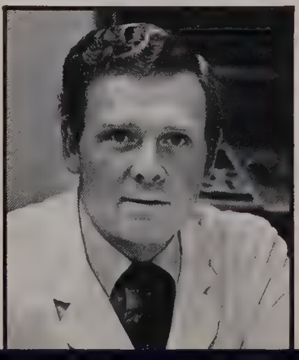
Dr. Spach, a Duke graduate, received his M.D. from Duke University where he also completed his residency work.

DISTINGUISHED PROFESSORS

Professor Wallace received his B.S. degree in medicine from Duke University and in 1959 was awarded the M.D. degree by Duke. He received further training at Duke Hospital and at the National Heart Institute. After serving as Chief Resident in medicine at Duke, he continued his teaching in the Department of Medicine and is presently Professor of Medicine and Chief of the Division of Cardiology. He is also an Assistant Professor of Physiology.

For five years a Markle Scholar, Professor Wallace is coauthor of approximately 150 professional articles and sections of textbooks. His major research contributions have been in cardiac physiology and the physiological basis of distrubances of cardiac rhythm.

Andrew G. Wallace



Dr. Wyngaarden attended Calvin College and Western Michigan College before entering the University of Michigan, from which he received his M.D. degree. He came to Duke Medical School in 1956 in the Department of Medicine and became Associate Professor of Biochemistry and director of the Medical Research Training Program in 1959. In 1965, he became Chairman of the Department of Medicine at the University of Pennsylvania, a position which he left in 1967 to return to Duke to fill the equivalent post.

Dr. Wyngaarden received his clinical training at Massachusetts General Hospital and has been an investigator at the Public Health Research Institute of New York, the National Heart Institute, and the National Institute of Arthritis and Metabolic Diseases. He also spent a year as guest scientist at the Institut de Biologie Physicochimique in Paris. He has published over 160 scientific papers.

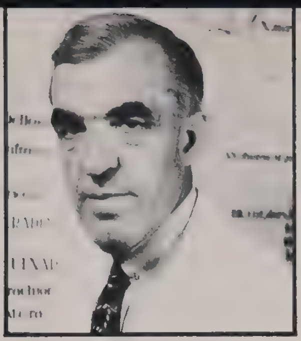
James B. Wyngaarden

1892-1972
Wilburt C. Davision, M.D.

Dr. Wilburt C. Davision, a native of Grand Rapids, Michigan, received his A.B. degree from Princeton in 1913; B.A. degree from Oxford University, Oxford, England in 1915; a B.Sc. in 1916 and the M.A. degree from Oxford in 1919. He was a Rhodes Scholar 1913-1916. He received the M.D. from the Johns Hopkins School of Medicine in 1917, and the LL.D. from the University of North Carolina and Duke in 1961.

Dr. Davision was an Instructor, Associate Professor and acting head of the Department of Pediatrics and Assistant Dean at Johns Hopkins 1919-1927. In 1927 at the age of thirty-five, he was chosen to plan, organize, and build the new Duke University School of Medicine and Hospital. While many helped at the birth and throughout the intervening years, Duke Medical Center and all that it is today, was the endeavor of the first Dean and Chairman of Pediatrics who directed the medical school from the ground up. He guided it to the place of prominence and eminence that it now holds.

Dr. Davision, or "Dave" as he liked to be called, felt very strongly that Duke's prestigious position was due largely to its graduates and those who trained here.



1883-1946
Frederick M. Hanes, M.D.

Dr. Frederic Hanes, a native of North Carolina, received the A.B. degree from the University of North Carolina in 1903, A.M. degree from Harvard in 1904 and the M.D. degree from The Johns Hopkins Medical School in 1908. He interned at the Johns Hopkins Hospital, was an Associate Professor of Pathology at Columbia University 1909-1912, pathologist at Presbyterian Hospital, Associate Professor of Medicine at Washington University School of Medicine and an internist in his hometown of Winston-Salem 1908-31.

Dr. Hanes came to Duke in 1931 and became a Professor of Medicine in 1933. Dr. Hanes belonged to numerous medical organizations and served in the military during World War I.

Hanes Ward of Duke South was named in his honor. He died March 25, 1946.

DECEASED DISTINGUISHED PROFESSORS

Dr. Joseph Markee was born in Neponset, Illinois. He received the B.S. degree from the University of Chicago in 1924 and the Ph.D. from there in 1929. He was a faculty member at Stanford from 1929-43. He came to Duke in 1943 as Professor of Anatomy, James B. Duke Professor of Anatomy, and Chairman of the Department of Anatomy. He held those positions until 1966. He was an assistant dean of medical admissions 1943-66.

Dr. Markee, as an anatomist, held membership in both anatomical and orthopedic organizations. He was a member of the Phi Beta Kappa and Alpha Omega Alpha Honor Societies. He was an editor of the *Journal of Morphology*. He also produced movies on functional anatomy and received a posthumous award from the Council on Medical Television Roster.

He died in 1970 and was interred in Durham.

1903-1970
Joseph E. Markee, Ph.D.

Joseph W. Beard

Joseph W. Beard, formerly in charge of experimental surgery and Professor of Virology at Duke, was head of the University Medical Center's laboratory for the study of viruses in relation to cancer. A year after joining the Duke faculty in 1937, he became one of the developers of the first usuable vaccine for equine encephalitis. In 1943 he and his associates obtained purified influenza virus for study, and in 1958 they isolated and identified two cancer viruses that cause leukemia in chickens. The following year his group was one of two to report the first tangible evidence of viruses in association with human leukemia.

Dr. Beard received his B.S. degree from the University of Chicago and his M.D. degree from Vanderbilt University. He is a member of the American Association for Cancer Research.

Frederick Bernheim

After taking his A.B. degree from Harvard, his Ph.D. degree from Cambridge, and pursuing additional studies in Munich, Frederick Bernheim joined the staff of Duke University in 1930. The same year, he was named a fellow of the National Research Council. He has published extensively in scientific journals on the effects of drugs on cells. For his work, he has been named fellow of the American Association for the Advancement of Science and a fellow of the New York Academy of Science.

Professor Bernheim has served as president of the Duke University chapter of Sigma Xi and for five years acted as editor of the *Proceedings of the Society for Experimental Biology and Medicine.* He was a consultant for the Biology Division of the Atomic Energy Commission.

Since retirement, Dr. Bernheim has continued to maintain an active interest in pharmacology and has continued his contact with medical students.

PROFESSORS EMERITI

Norman F. Conant, former Chairman of the Department of Microbiology and Immunology, has received wide recognition for his work in the fields of mycology and microbiology. He has served the government as consultant in tropical medicine to the secretary of war, as a member of several committees of the National Institutes of Health, and as a member of the Subcommittee on Cutaneous Diseases of the National Research Council. For several years, he was a member of the Advisory Panel for Microbiology, Office of Naval Research.

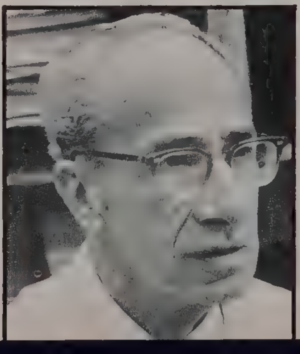
Professor Conant received his B.S. from Bates College. After taking the M.A. and Ph.D. degrees from Harvard, he spent a year at the University of Paris School of medicine as recipient of a Sheldon Traveling Fellowship from Harvard. He came to Duke in 1935, and in 1958, he became Chairman of the Department of Microbiology in the Medical School. He has contributed numerous papers to journals in his field.

Norman F. Conant

Jerome Sylvan Harris, former Chairman of the Department of Pediatrics at the Duke Medical Center, holds appointments in both pediatrics and biochemistry. A member of the Duke faculty since 1937, he earned his A.B. degree at Dartmouth College and his M.D. degree at Harvard Medical School. Dr. Harris had additional training in Boston, Chicago, and at Duke. He research interests include metabolic disturbances in pediatrics and pediatric cardiology; he has written many articles on these subjects.

During World War II he served in the Army Medical Corps. He served as chief of the Communicable Disease Section of the General Hospital at Fort Bragg. He has served as a consultant to the National Board of Medical Examiners and has been a member of the Human Embryology and Development Study Section of the National Institutes of Health.

Jerome S. Harris



David T. Smith

David T. Smith, an Anderson, S.C. native, received his B.A. degree from Furman University and his M.D. from the Johns Hopkins Medical School. He completed an internship in pediatrics there before going to the Rockefeller Institute to study pathology and bacteriology.

Dr. Smith came to Duke in 1930 as Professor in charge of Microbiology and Associate Professor of Medicine. His contributions to the field of mycotic and fungal diseases are many and were recognized in 1957 with the Trudeau Medal and the Medal for Distinguished Service from the Southern Tuberculosis Conference in 1958. He is author of numerous publications and was editor of Zinsser's **Microbiology**. Professional societies of which is is a member include the National Tuberculosis Assoc. (Pres., 1950), the American Board of Microbiology, and the American Society of Immunology. Although no longer Chairman of the Department of Microbiology, Dr. Smith was named James B. Duke Professor of Microbiology in 1960, and in 1963 he became Chairman of the Department of Preventative Medicine.

Eugene A. Stead, Jr.

Eugene A. Stead, Jr., a native of Atlanta, Ga., received his B.S. and M.D. degrees from Emory University. He was Phi Beta Kappa and a member of Alpha Omega Alpha. He received his postgraduate training at Peter Brent Brigham, Harvard and Cincinnati General. From 1937-42 he was first assistant then instructor in medicine at Harvard. In 1942 he was named Professor and Chairman of the Department of Medicine at Emory. He was Dean of Emory Medical School 1945-1946. He came to Duke in 1947 as Professor of Medicine and Chairman of the Department of Medicine.

Dr. Stead has been on the advisory councils of the National Institute of Arthritis and Metabolic Diseases and of the National Heart Institute. He is a member of the Association of American Physicians, the American Society for Clinical Investigation, the American Physiological Society, the Association of University Cardiologists, the National Academy of Science Institute of Medicine. He is a Distinguished Physician of the Veterans Administration. Dr. Stead has received honorary degrees from Emory, Yale and the Medical College of Ohio.

PROFESSORS EMERITI

Except for the period from 1942-46 when he was on leave serving as lieutenant colonel in the Army Medical Corps, Barnes Woodhall has been an active faculty member since 1937, when he came to Duke from Johns Hopkins University. A native of Maine, he graduated from Williams College and completed his M.D. degree at Johns Hopkins, where he also served as intern, resident, and instructor in general and neurological surgery.

At Duke University, Dr. Woodhall was Professor and Chairman of the Division of Neurological Surgery from 1946 to 1960, when he succeeded Dr. Wilburt Davision as dean of the School of Medicine. In the years following, he served as vice-provost, associate provost, special assistant to the president of Duke University, and in 1969, as chancellor pro-tem, a position held for over a year before returning to full-time teaching and research.

Throughout his active career as public servant and academic administrator, Dr. Woodhall has remained primarily a teacher and a scholar.

Barnes Woodhall

HISTORY

The history of Duke University Medical Center began in the early twentieth century as a number of forces came together: the philanthropy of James Buchanan Duke, the desire of a number of men to improve health care in the Carolinas, and the mood of the national medical community. In this section, the growth and development of the Medical Center are traced from this time when a hospital and medical school were but ideas in the minds of a few men — Dr. Albert G. Carr, George Washington Watts, Dr. Joseph Graham and James B. Duke — to a major medical center considered to be among the best in the nation. In the first half of the past hundred years, the start and accumulation of the Duke family fortune coupled with various attempts to establish adequate medical care in Durham, eventually resulted in the building of Duke Medical School and its opening in 1930, under the direction of Dr. Wilburt Corbett Davison. The next fifty years — the years most of us are more familiar with — saw the changes that occurred as the school matured in the thirties, adapted to the conditions of a world war in the forties, followed the national trend in increased medical research in the sixties, and modernized and expanded the medical complex in the seventies. The result is the Duke Medical Center that we know today.

Special thanks go to Pam Reynolds, Frank Spence, Jackie Rutledge, and Tom Collier for their research into the history of Duke and the Medical Center, to the University and Medical Center Archives for the historial material and photographs that they provided, and especially to Dr. Jim Gifford for his invaluable help is so many ways. Marsha Adams, Pam Sholar and Ann Lansing deserve to be recognized for their endless hours at the typewriter.

5

HISTORY

Duke and Health Care in Durham 1865-1931 83

The Growth of a Medical Center 1930-1965 99

The Years 1965-1980 115

Duke North 131

Section Editors
Pamela "Preston" Reynolds
Frank Spence
Jackie Rutledge
Tom Collier

DUKE AND HEALTH CARE IN DURHAM 1865-1931

James Buchanan Duke, wealthy tabacconist and developer of electric power in the Carolinas, released the intentions for his large philanthropic creation, the Duke Endowment, on December 11, 1924. The organization of this foundation reflected an ongoing pattern of philanthropy by J.B. Duke's father and brother, Washington and Benjamin Newton Duke. Created with securities valued at forty million dollars, James B. Duke specified that the Endowment be broken down as follows: twenty percent of the net amount must be used to increase the principal of the trust to reach the original sum of forty million dollars; thirty-two percent would go to Duke University; thirty-two percent would be used to help build and maintain non-profit, community hospitals in North and South Carolina; three schools in the two Carolinas would receive fourteen percent; the remaining amound would aid churches, preachers, orphans and other benevolent organizatons or groups as determined by the Trustees of said Endowment. Section Four of the Indenture allocated six million dollars to Trinty College if and when the school changed its name to Duke University as a memorial to James B. Duke's father, Washington Duke, whose gifts combined with those of his brother, Benjamin, brought Trinity to Durham, North Carolina, and thereafter supported its growth. Within the university structure, Trinty College could serve as an undergraduate department for men, but this larger institution must include a Divinity School, education and chemistry departments, a Law School, a Co-ordinate College for Women, a Business School, graduate programs in Arts and Sciences, an Engineering School, and a Medical School, "as and when funds are available." The possibility of the medical school and hospital became reality when the terms of J.D. Duke's will became known at his death one year later. A sum of ten million dollars was added to the Duke Endowment, four million dollars of that was to be used "in erecting and equipping at the Duke University . . . buildings suitable for a Medical School, Hospital and Nurses' Home." But money alone would neither create excellence nor insure innovations. The dreams and ideals of individuals, trends in medical education, and the demand for superiority characeristic of all Duke's undertakings served as the foundation for the Duke University Hospital and Medical School. Within Durham itself there existed a long history of concern with health problems and a desire for a medical school and hospital. To that story we now turn.

The Duke family fortune is rooted in the expansion of the tobacco industry in Durham after the Civil War. At the close of fighting, Washington Duke returned home to his four motherless children. After peddling a few dry goods and a small amount of tobacco left hidden in his barn, Duke settled down and once again farmed the land he owned. Amongst the corn and wheat, Duke planted tobacco. When weather prohibited working in the fields, Washington Duke and his sons, Brodie Leonidus, Benjamin Newton, and James Buchanan, in a small log cabin, flailed, sifted, and packaged their bright-leaf tobacco. Mary Elizabeth, Washington Duke's only daughter, sewed the cotton bags which held the smoking mixture and affixed the Duke label, "Pro Bono Publico." During the first year the family produced about 15,000 pounds of tobacco. By 1872, the amount of smoking tobacco they manufactured had jumped to 125,000 pounds and required the space of three barns to process.

Washington Duke on the porch of the Duke homestead

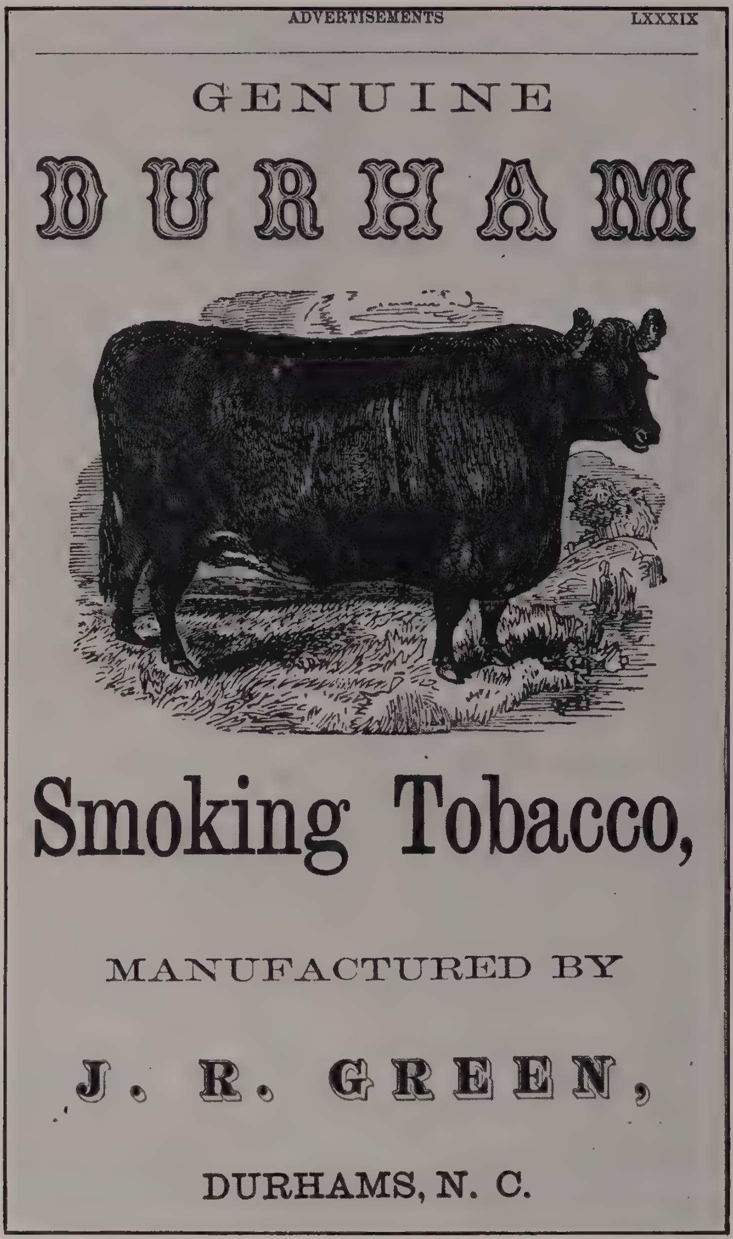
The following year, Washington Duke moved his family and their tobacco operations into a factory built at the cost of $1,500 and located next to the railroad tracks in Durham. Brodie Duke, the eldest son, having moved in town two years earlier, continued to operated independently, manufacturing smoking tobacco in one-half of the new factory. Other businessmen also felt the necessity to locate their operations closer to the area's transportation facilities — the Dukes opened the fourteenth tobacco factory in Durham after the pioneering effort of John R. Green in 1858. In the decades following the Civil War, Durham established itself as the tobacco manufacturing center in North Carolina.

The early success of Durham's largest manufacturer of smoking tobacco, W.T. Blackwell and Company, inspired others to enter the market, which in turn created stiff rivalry. In 1868 William T. Blackwell purchased Green's entire business for $2,850. Ten years later, a one-third interest in Blackwell's sold for $94,000. Four years later the same interest cost $150,000. This company manufactured the celebrated brand of smoking tobacco, "Bull Durham Tobacco," which had become by 1884, "a household word from Maine to the Gulf and from the Atlantic to the Pacific slope, and in many foreign countries" according to the town's first chronicler, Hiram Paul.

Struggling against this competition, the Dukes increased their capital by accepting a partner, George Washington Watts, in 1878. Capitalized at $70,000 equally divided among the four Dukes and George Watts, W. Duke, Sons and Company emerged with a new organizational structure. James B. Duke acted as president and general manager; Benjamin Duke conducted all business corresponsdence; George Watts kept the books. Richard A. Wright, who bought out Washington Duke in 1880, became the firm's chief salesman. In 1880, however, W.T. Blackwell and Company processed nearly thirty thousand pounds of tobacco daily and employed over twice as many people as the Duke enterprise. Frustrated by the inability to surpass the sales of "Bull Durham Tobacco," J.B. Duke announced, "My company is up against a stone wall. It cannot compete with the Bull. Something has to be done and that quick. As for me, I am going into the cigarette business."

James B. Duke proposed to surpass the sales of "Bull Durham Tobacco" by combining a means of machine-producing cigarettes inexpensively and rapidly with the creation of new and larger markets for machine-made cigarettes. In 1881, employing 100 Eastern European immigrants skilled in the craft of rolling cigarettes, the firm produced 9,800,000 cigarettes — a small percentage of the 384,082,429 cigarettes sold by New York firms one year earlier. By 1884, however, machines developed by James Bonsack had been installed in the Duke factory. A mechanic named William T. O'Brien was responsible for getting the bugs out of these first operational machines. But the sales of hand-rolled cigarettes still far outstripped those of the machine-made variety. If W. Duke, Sons and Company were going to reap large profits from this new product, they would have to create a market.

In 1884 the company constructed a factory in New York in order to capture some of the Eastern trade. By 1887 largely as the result of effective advertising, the number of machines used by Dukes jumped to 24 and the number of cigarettes produced to 2,000,000 per day. Two years later, W. Duke, Sons and Company produced 940,000,000 cigarettes annually, paid the government $600,000 in taxes and spent $800,000 on advertising, 20 percent of their gross sales. Duke not only had created a market for cigarettes, but also a voracious appetite for the new smoking device that companies throughout the country fought competitively to satisfy.



ADVERTISEMENTS LXXXIX

GENUINE

DURHAM

Smoking Tobacco,

MANUFACTURED BY

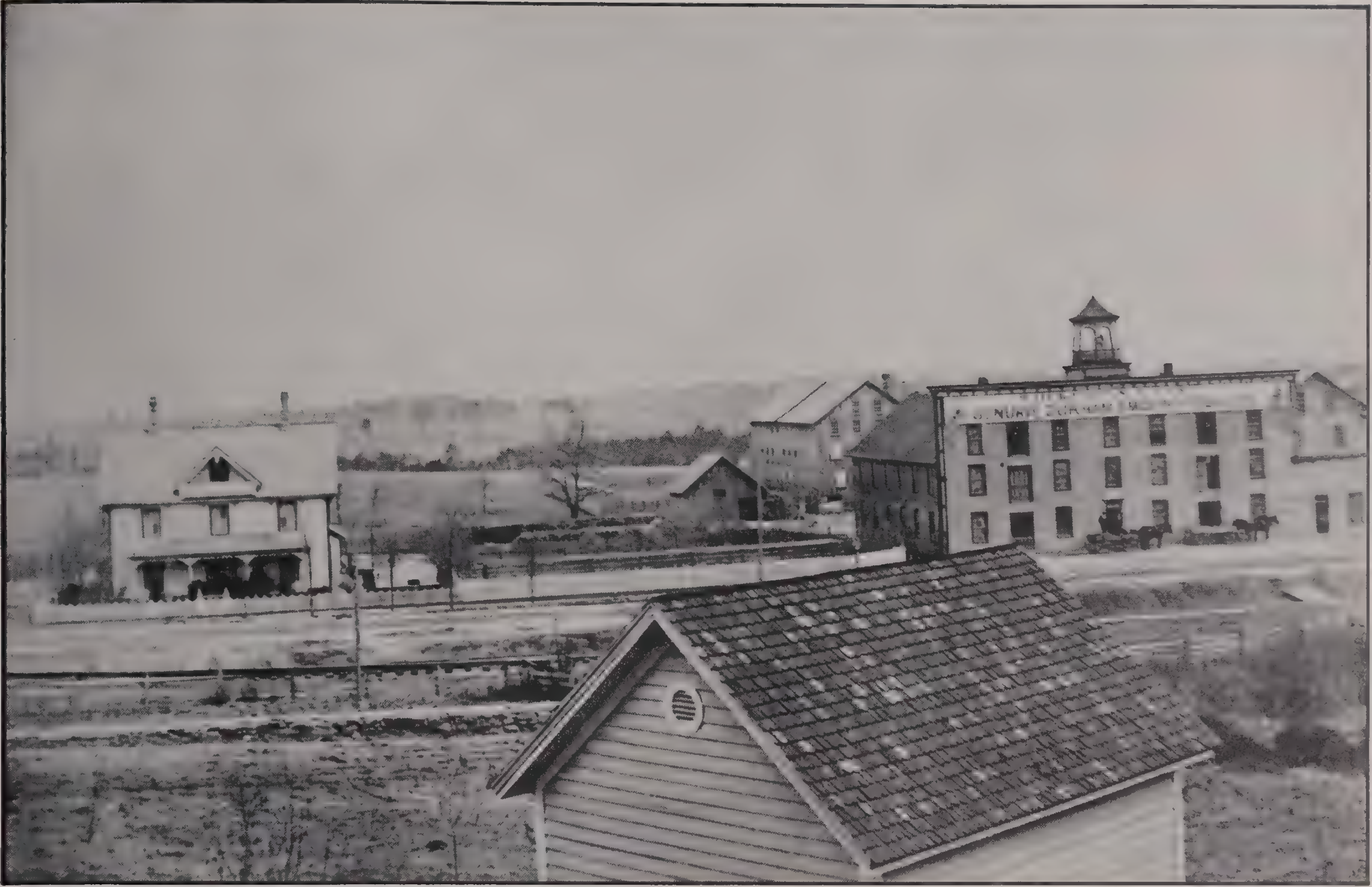
J. R. GREEN,

DURHAMS, N. C.

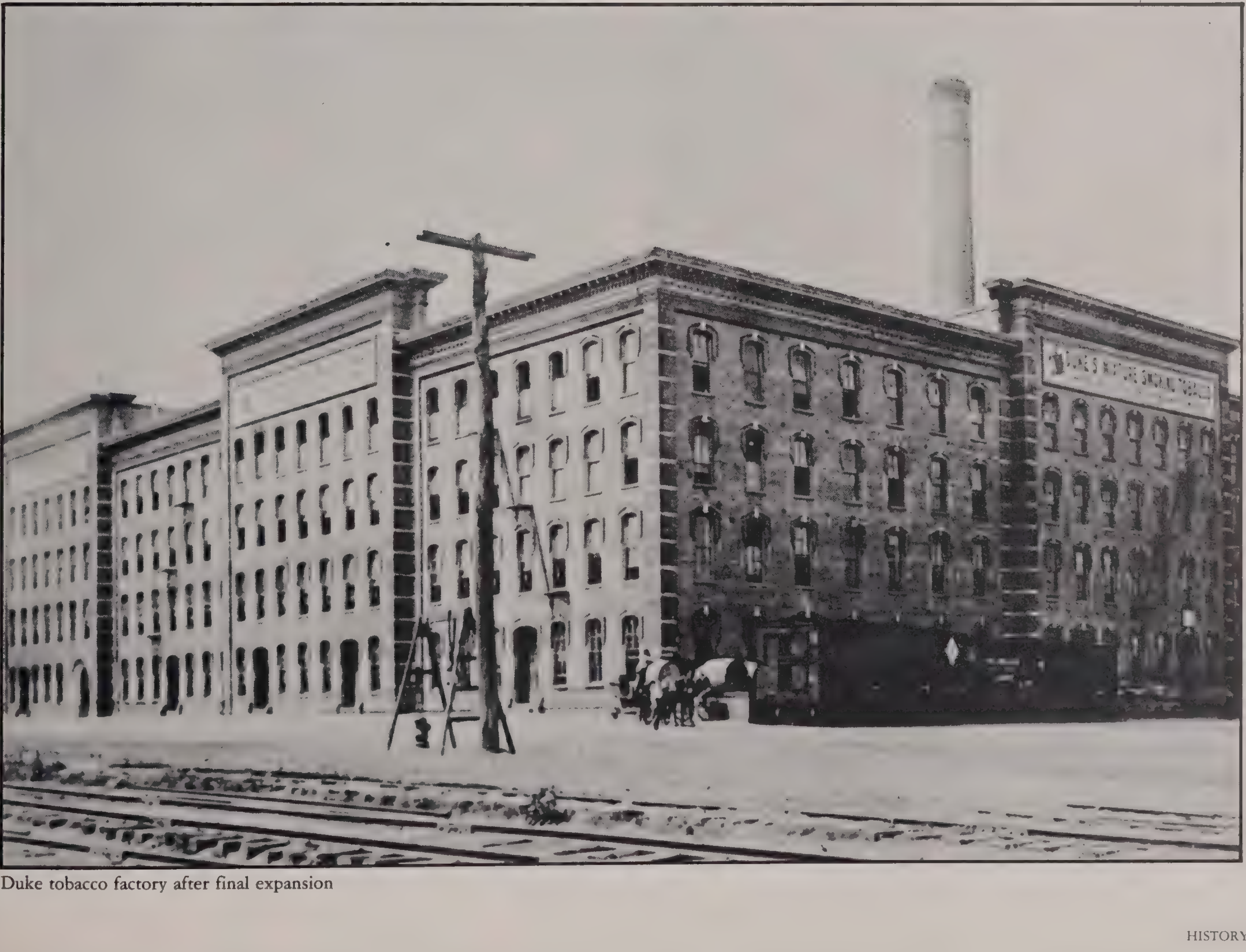
Early adverstisement for "Bull Durham Tobacco."

James B. Duke sat down in 1890 with the presidents of the other four leading cigarette manufactures in the country and outlined a plan for combination of these firms into the American Tobacco Company. These five companies produced nearly ninety percent of the cigarettes in the United States. In the first two decades of its operation, the equity capitalization of the new firm jumped from $25 million to over $316 million. By 1911 the American Tobacco Company controlled eighy percent of the cigarettes, smoking tobacco, plug tobacco and snuff produced in this country. The empire became an integrated network which included companies engaged in wholesale and retail distribution of all tobacco products, production of the leaf, packaging, and even a monopoly on licorice, a flavoring for tobacco. Expansive policies led to the creation and domination of markets in other countries as well.

Duke's personal fortune continued to climb as sales jumped, competition softened, and barriers into foreign countries crumbled. James B. Duke's business partners in Durham, his father, his brother, Benjamin, and George Watts all saw their wealth multiply as stock holders in the American Tobacco Company and the British-American Tobacco Company. When court order ruled the dissolution of the American Tobacco Company in 1911 under antitrust law, the government noted that Duke and nine other stockholders held sixty percent of the outstanding voting stock.



Duke factory on right, home of Washington B. Duke on left, ca. 1883



Duke tobacco factory after final expansion

Trinity College, Circa 1895

As the fortunes of the partners began to increase in the early 1890's they gave their attention increasingly to philanthropic enterprises. Washington Duke pledged his solid support to both the Methodist Church and the Republican party. When Dr. John Franklin Crowell, president of Trinity College, in 1890 voiced his desire to move the liberal arts Methodist school to a commercial center in hopes of placing its financial footing on firmer soil, Washington Duke responded with a commitment of $85,000 to be used toward endowment and buildings if the school were moved to Durham, and women were admitted by equal standards and offered equal educational opportunities. The total bid from Durham reached $100,000 plus land on the west side of the city. Trinity could hardly pass up the offer (even though educating women would be a new venture) when Raleigh, the only other contender, promised land and $20,500 — the cost of duplicating the facilities in a new location.

Trinity College, ca. 1895. Craven Memorial Hall in front of the library. The land was formerly a park, and the track was used for horse races.

Durham citizens were determined to win this contest for Trinity College. The Baptist Female Seminary (now Meredith College) had recently rejected Durham's very lucrative offer in preference to Raleigh as the site of their new location because "Durham was lacking culture, possessed sordid ideals, and was therefore no fit place for innocent girls to abide in." The Methodist conferences voted in favor of Durham, and Trinity received its first philanthropic gift from Washington Duke.

As years passed Washington Duke and his son, Benjamin, became more involved with the financial needs of the institution. At first Washington Duke's interest in Trinity College waned when he realized that the Methodist constituency, comprised mainly of small North Carolina farmers, was not enthusiastic nor able to contribute to the economic needs of its denomination's college. Benjamin Duke, angry that the students chose in 1890 a commencement speaker that had publicly criticized his family, wished he and his father might "wash our hands of the entire affair." But Dr. John Carlisle Kilgo, a Methodist minister elected president of Trinity College in 1894, managed to rekindle the elder Duke's tie to the school. Evidence of this was the $50,000 received by Trinity from Washington Duke in 1895. By the time he died in 1905, Washington Duke had disposed of most of his fortune, over $300,000 of which went to Trinity alone.

In 1907, Benjamin Duke tabulated the Duke gifts to schools and institutions to have reached approximately one million dollars, Trinity College receiving perhaps $800,000. The Durham community associated Trinity with Duke money. There was no doubt to whom the financial committee turned when needing capital for expansion, faculty salaries, or merely paying off debts. As Benjmain Duke said in 1907, "I am practically carrying that institution single-handed. It needs more money than I feel able to give it." The Dukes have never failed in any venture; Trinity would not be the first. And while Benjamin and his father aligned themselves with the cause of education, their business partner, George Watts, chose health care.

Benjmain Newton Duke

Expansion from a hamlet of 100 inhabitants at the end of the Civil War to 2,041 by 1880 and then 5,485 by 1890 had created new problems for the town's leaders. Among the concerns, the most conspicuous was poor health conditions. Durham was not a clean town. Tobacco employees lived in boarding homes, factory housing units, small rooms above businesses and, in some cases, private residential areas. Certain parts of town were crowded. Whites, whether poor or rich, lived apart from blacks, but common to all were the problems of inadequate sanitation facilities. In 1887, the *Durham Tobacco Plant,* the town newspaper, asked its readers why didn't the police find that "nearly all the gulleys and ditches in town are filled with filth and trash and stagnant water?" Filth, the paper argued, was everywhere. You could not "walk without seeing it" or "take a breath without smelling it." Contagious diseases ran wild. Typhoid fever was so common that it was called "Durham fever" by residents of other towns. Infantum cholera claimed the lives of many children. Diphtheria, tuberculosis, and malaria all ranked high as causes of death according to the city's cemetery records. Without any water or sewerage systems, health officers fought a difficult battle stopping the spread of disease.

Efforts to improve sanitation often met delay, if not defeat, when newspapers, the city government, and the health officer depended upon community participation. Only slowly did the public hedge toward an understanding of the importance of public health measurers in combating infectious diseases. In 1885 the town government passed a bill allowing Durham to issue bonds to erect a water works. The *Tobacco Plant* adopted this cause, but its editorials repeatedly reflected disappointment. As the paper stated, "We have preached waterworks to our citizens without witnessing tangible results till almost ready to despair." Although the town finally got water in its reservoir in 1893, the town officials refused to pay the bill until the condition of the water improved. Among other unforeseen problems was the fact that many citizens could not afford the cost of hook-up to the water line and, later, to the sewerage system. Only gradually did awareness of public health problems combine with allocation of economic resources to provide sanitation for the majority of residents.

Attempts to mobilize community financial support to establish a hospital also failed. Dr. Albert G. Carr, pioneer of the local hospital movement, in 1884 first presented the Board of Aldermen with a plan to establish a hospital. The idea never moved beyond selection of a committee to investigate the issue. Four years later, in the midst of the campaign for better sanitation, the Orange County Medical Society raised the issue of building a "hospital for the poor" and invited cooperation of different churches, benevolent organizations, prominent citizens, and the county and town commissioners. But Durham's businesses received a jolt in 1888. Blackwell's bank folded with several other enterprises following. The depression was not severe, but proved enough to inhibit people from contributing money to a non-profit cause. Thus the second hospital movement died. The *Tobacco Plant* continued its campaign for a waterworks, seen to be a more practical investment in view of the enormous loss of property resulting from fires that swept through Durham in the 1880's.

Three years later, representing a group of physicians concerned with the state's shortage of doctors, Dr. A.G. Carr presented President Crowell of Trinity College with a plan of establishing a medical school and hospital as part of the Trinity campus. North Carolina needed both. In 1890, it ranked forty-first among forty-five states in the ratio of physicians to population, 1 to 1250. The only existing medical training program was a two-year preparatory medical course at the University of North Carolina. Upon completion, students transferred into northern medical schools. Most practicing physicians in North Carolina received their education as apprentices to country doctors. In 1892 the state claimed but five hospitals. When medical treatment was needed, patients traveled north, out of North Carolina — if they could afford the cost.

The medical school Carr proposed included professorships in seven basic areas: Anatomy, Physiology, Practice, Surgery, Materia Medica, Obstetrics, and Chemistry. A hospital completed the package. Crowell's plan modified and expanded the rough guidelines. Housed in a new building, the medical school would open October 1, 1891. The complex was to include two converted homes adjacent to the campus. A resident surgeon and a resident physician had full responsibility for the hospital, for which they each would receive $2,000 a year. With the help of two faculty members in the sciences, the physician and surgeon would teach the first two years of medical school. Salaries of the doctors could be paid out of the hospital's income, private gifts, and medical care fees of students. Within two years professorships in three areas would be added: Practice and Pathology, Surgery and Gynecology, and Diseases of Children and Obstetrics. The proposal seemed acceptable to both the physicians and Crowell's desire to expand Trinity's educational framework.

George Washington Watts

Yet the medical school and hospital were never built because the General Assembly refused to endorse the school's right to license students upon graduation, and a mild depression choked off funds. North Carolina farmers tightened their belts as prices for their tobacco and other corps dropped in the early 1890's. If Methodists could not find money to support Trinity, reliance on this source for means to build a medical school and hospital would have been foolish. Fortunately for Carr's hospital campaign some of the profits from Durham's industrial growth were held by a man who was personally interested in health care. In 1895 George Watts built and endowed the city's first hospital, the seventh in North Carolina.

George Washington Watts was born in Cumberland, Maryland, attended schools in Baltimore, and graduated from the University of Virginia in 1871. After working as a salesman for his father, a tobacco wholesale and retail dealer, Watts moved to Durham with his wife and daughter in 1878. Within three years, he sat on the Board of Aldermen, the governing body of the town.

In 1881, Watts and Edward J. Parrish, owner of a large tobacco warehouse, were elected by the Board as a Santitation Committee. Their main responsibility was locating a site for a cemetery. Driving and walking through Durham in search of land may well have exposed them to the town's health problems. In 1884, during the same meeting that Dr. Albert G. Carr was hired as city physician, Watts was elected to the fire department. One year later the city government took its first steps toward building the waterworks. The professional association between Dr. A.G. Carr and Watts deepend with time as Carr became Watts' physician and close personal friend. In fact many have argued that Carr used the advantages of a friendship with Watts to influence the tobacco magnate to use his money to construct Durham's first hospital. Dr. Carr doubtlessly availed himself of every opportunity to discuss the health needs of the community with his friends, but Watts' own interest and involvement with measures to clean up the town were probably sufficient to make him realize the importance of health care facilities.

Watts' personal experience with medicine was broad and varied. A younger brother, Arthur G. Watts, practiced medicine in Baltimore, but died in 1889 at the age of twenty-seven. Mrs. George Watts frequently traveled to The Johns Hopkins Hospital with recurrent bouts of kidney disease. In 1892, George Watts himself was hospitalized, and as he said at the dedication of the hospital, the wonderful nursing care he received during this illness directed his interests to hospitals. After returning to Durham, he solicited the advice of Dr. A.G. Carr on a location for a hospital. Architects from Boston drew the plans.

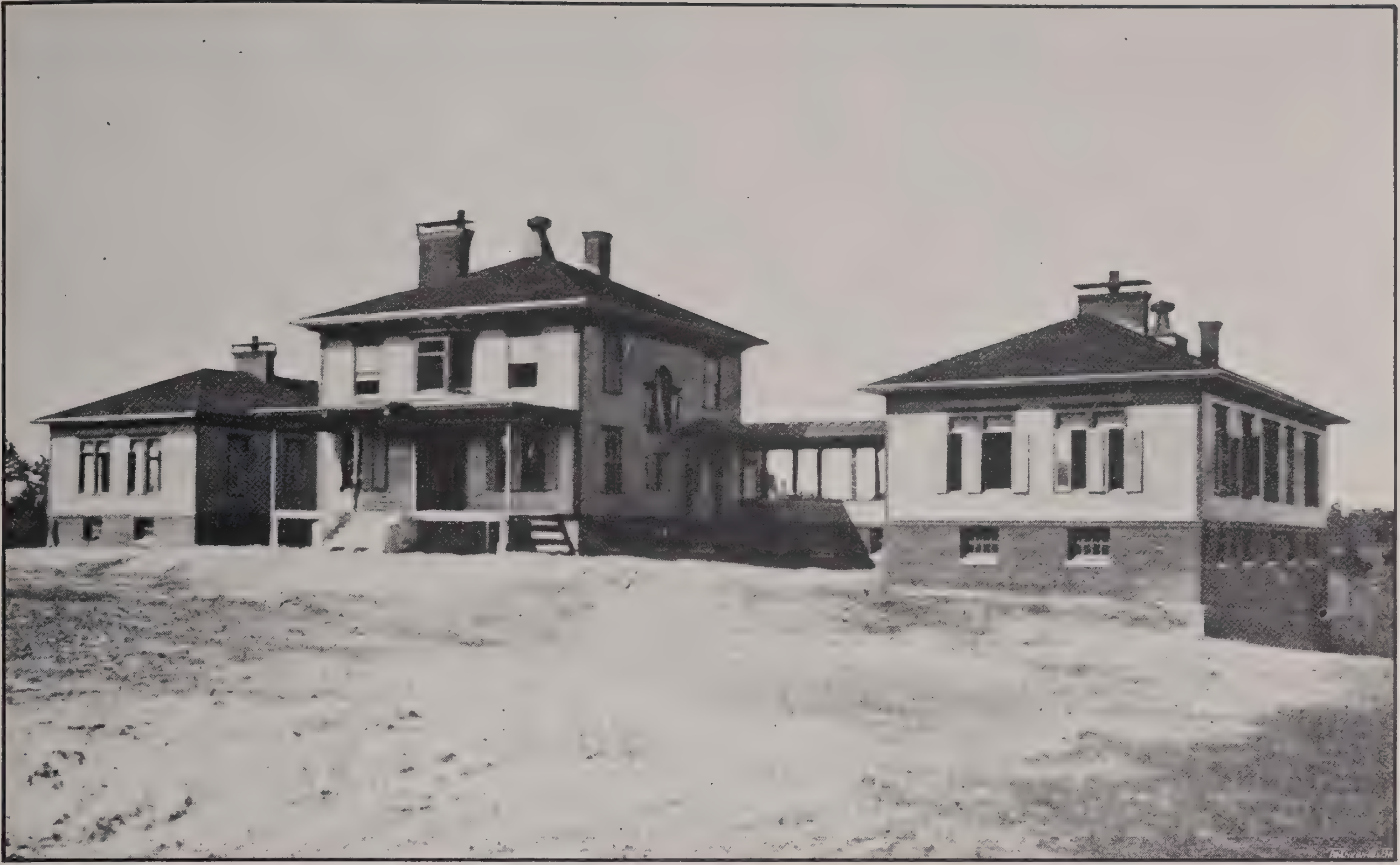
Beyond the shape Watts' gift would take stood the pattern of philanthropy developed by the patrician leaders of the town. Benjamin Duke gave liberally to Trinity College. Julian Shakespear Carr, partner of W.T. Blackwell and Company, donated the land on which Trinity sat. William T. Blackwell supported the public school system until it received adequate financial backing from the community. Nearly every leading industrialist helped to construct a church.

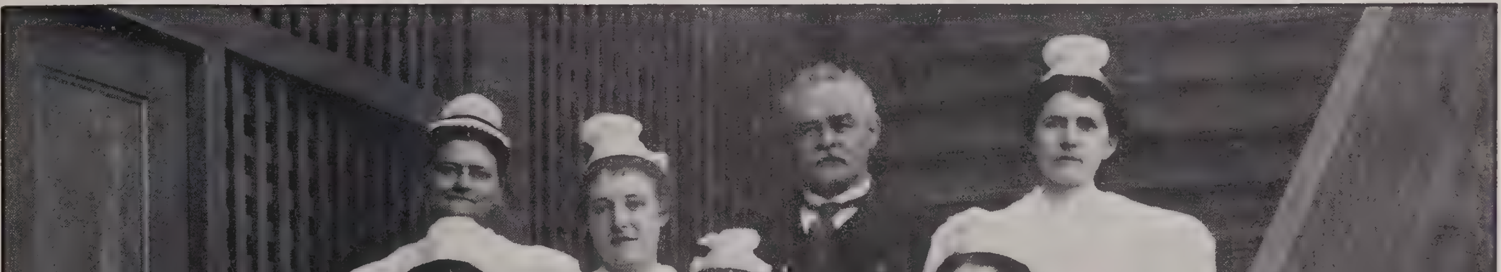
As a devout Christian, Watts was closely involved in Durham's religious life. He served the First Presbyterian Church as deacon, elder, and superintendent of the Sunday school for almost thirty-six years. From 1905 until his death in 1921, he acted as the President of the Board of Trustees of Union Theological Seminary. He gave the Seminary sums totaling over $270,000 in building funds, endowment capital, and salary supplements. To most people, "Mr. Watts was a stewart of God." He contributed to a theological center, orphanages, colleges, schools, a hospital, and even a health clinic in Korea. His gift of Watts Hospital marked a combination of Christian stewardship, social responsibility, concern and need expressed by the community and friends and, equally important, his personal interest in health care.

Located on the corner of Main Street and Buchanan Road, the original Watts Hospital complex of five connected buildings included an administrative building, male and female wards, a surgical suite, an autopsy suite and mortuary facilities with a carriage house located in the rear. At a cost of $30,000, Watts Hospital was built in the cottage style of hospital architecture. Many small hospitals throughout the country adopted this design because it was both inexpensive and functional. To the cost of construction, Watts added $20,000 for an endowment.

Proud of its charity provision, Watts pointed out that Watts Hospital was, at the time of its founding, the only hospital in the state or region (not including those receiving government assistance) which had a real charity feature connected with it. The hospital proposed "to give all persons in need, care and treatment, absolutely without price." It contained twenty-two beds, eighteen being "free." Admission was, however, restricted to the white community.

When Watts Hospital opened, it met with mixed reactions from the Community. The Board of Aldermen immediately appropriated $100 "to help defray the necessary expenses of conducting the said Hospital." During the first ten months, however, only sixty-eight patients were treated at Watts, even though it was the first hospital in the State to receive a class "A" rating from the American Medical Association.


Watts Hospital located at corner of Buchanan and Main St. ca. 1895


Dr. A.G. Carr, pioneer of hospital movement in Durham, and Watts Hospital nurses. ca. 1899

Dr. Aaron M. Moore, center, founder of Lincoln Hospital, Charles Clinton Spaulding to the right and John Merrick to the left

Patronage of Durham's cottage hospital rose gradually as the population of Durham grew. With few deaths being reported, people learned that hospitals were not necessarily places to die. From 1890 to 1910, the number of inhabitants leaped from 5,485 to 18,341. In 1906, noting the hospital's demand for more space, George Watts financed the construction of a new two-story building containing eight wards, but even this "did not supply the demands", so Watts "began to think of bigger and better things." On December 2, 1909, the city received its second hospital from George Watts. At a cost of $217,000, including the cost of land and landscaping, the 110-bed hospital located on Club Boulevard (which at that time was outside the city limits) represented the pavilion style of architecture typical of large urban hospitals. The new design provided more air and light and a separation of various functions in different buildings. To this gift, Watts added $100,000 toward an endowment and made known his plan to increase this sum to $200,000.

Washington Duke

As the importance of hospital care was increasingly appreciated by Durhamites, a hospital was opened for the benefit of Durham blacks. The health conditions that prompted Carr to campaign for a hospital were not confined to the white community. Dr. Aaron Moore, the city's only black physician, began in the 1890's to seek contributions for the construction of a hospital from the city's industrialists. Washington Duke had expressed a desire to build a monument on the Trinity campus honoring the blacks who fought for the Confederacy. With the help of Washington Duke's butler, cook, and barber, all black, Drs. Carr and Moore convinced the old tobacconist that a hospital would be a more valuable investment. In 1901 Duke and his sons donated $13,000 for the building of Lincoln Hospital, to be located on Proctor Street. The town government contributed $600 a year toward its maintenance; private donations met the remaining needs. With hospitals for both the blacks and whites in existence, some Durhamites began to think of ways to utilize the old Watts Hospital.

Yet publication in 1910 of the Flexner Report, written by Abraham Flexner, deadened all thoughts of establishing a medical school at Trinity. Both of North Carolina's four-year medical schools, North Carolina Medical College at Charlotte for white students, and Leonard Medical School in Raleigh for black students, closed under the attack against inadequate facilities and financial resources. But these two schools were not alone. Out of 155 schools measured against the standards set by The Johns Hopkins University School of Medicine, Flexner recommended operating 31; the remaining were unfit for teaching, and therefore, should be closed. Some schools closed before Flexner arrived, in order to keep their name and condition out of print. The number of medical schools dropped to 92 by 1915. Borderline schools either closed, merged, or survived intact depending on availability of capital to improve facilities and hire full-time faculty. As medical education underwent a revolution, its cost skyrocketed.

William Preston Few became president of Trinity College in 1910 when Kilgo was elected a bishop of the Methodist Church. William Preston Few was quite different in personality from Kilgo. Quiet, reserved, and hard-working, Few had become the candidate favored for the presidency by both Benjamin Duke and Kilgo. Within a year of assuming his new adminstrative role, Few won the recognition and support of the General Education Board, a Rockefeller foundation concerned with upgrading education throughout the country, with special attention paid to the needs of the South. The Board awarded Trinity $150,000 toward its one million dollar endowment drive. For the first time the college stepped beyond its dependence on the Dukes as principal philanthropists and became competitive for future foundation assistance. When Kilgo retired, Trinity had the largest endowment of any college in the South, and more importantly, it was financially sound. Expansion to a university once again seemed a reasonable goal.

The idea for a medical school at Trinity College had not died but simply remained dormant until more favorable conditions appeared. With an empty hospital across the street from Trinity's campus and an established pattern of strong financial support for health care from the Duke family and George Watts, Dr. Joseph Graham, a local physician, decided to reopen discussions of a medical school. Graham proposed that Trinity add departments of pharmacy, dentistry, and medicine to be housed in the old hospital property donated by Watts. Endowment would cover expenses beyond those paid with student tuition. The new hospital would provide the clinical experience necessary for complete medical training. Before publicizing the proposal, Graham sought the support for his plan from George Watts and Benjamin Duke. Watts agreed readily, but acting on an awareness of the changes in medical education since the original proposal in 1890, Benjamin Duke hesitated.

After the turn of the century, medical education throughout the country improved in quality and jumped in cost. Based on European models, research in the basic sciences became a foundation for classroom instruction and faculty qualifications. Medical schools must then include laboratories fully equipped with expensive equipment and possess the resources to pay a highly trained faculty. To insure that both of these standards would be met, the Johns Hopkins trustees in the 1880's had refused to begin planning a medical school and hospital without a base of one-half million dollars. Similar development at Trinity, as defined by the trustees, required that three conditions be fulfilled; that George Watts donate the old hospital property, that students have free access to the new Watts Hospital, and that an endowment of $300,000 be secured. Dr. Graham, President Kilgo, and William Preston Few, then Dean of Trinity College, were selected to investigate the issue and find the money.

Group at barbecue in Erwin, N.C. (then known as Duke), in July or August, 1904. L to R, first row: Messrs. B.N. Duke, Washington Duke, J.B. Duke, T.J. Walker, A.B. Carrington, J.S. Cobb, and John Angier. Second row: Dr. A.G. Carr, Messrs. W.A. Erwin, J. Ed. Stagg, Frank Tate, E.S. Yarbrough, Captain Lemon, and F.L. Fuller

The first two decades of the twentieth century saw the fortunes of the Duke family increase through diversification into textiles, electric power, and new markets for tobacco products. The establishment of Duke University Medical School and Hospital eventually came to depend on the development of water power resources. In 1905, James B. Duke organized the Southern Power Company (now the Duke Power Company). Two years after the dissolution of the American Tobacco Company, Duke invested $25,000,000 in water power and associated industries. The value of this venture doubled within several years. In 1914, he expanded his investment by building an electric power station on the Saugenay River in Canada. Initially this investment paid no dividened. Without buyers for his power, construction ceased. But in the early 1920's, Duke proposed to Arthur Vining Davis of The Aluminum Company of America that he build a smelter near the Canadian plant. The location offered the Aluminum Company of America cheap land, access to ocean navigation and inexpensive power, 50,000 to 100,000 horsepower from one plant, and the total energy production of a second plant. In exchange for the power station, Duke received 52,236 shares of preferred stock in ALCOA.

Beginning in 1916, Duke had expressed his desire to give away within his lifetime a large part of his fortune based on the earnings of his power plant. William Preston Few listened closely. During World War I, life at Trinity remained calm, but soon after the troops returned, the college experienced new presures for larger enrollments. Trinity was not alone. Dr. I.H. Manning, dean of the two-year medical school at the University of North Carolina, told Few that he desired to somehow meet the demand for medical training from students throughout the state. His school faced the problem of insufficient funds which restricted faculty payroll, amount of equipment, and consequently the number of students. As the cost of medical education continued to rise, the condition intensified. Out of an estimated 400 pre-medical students in North Carolina, 100 were licensed annually; Manning had room for only 40.

Benjamin Newton Duke, James Buchanan Duke

Dr. William Preston Few

President Few had already noted the increased interest in medicine at Trinity. In 1916, he wrote Simon Flexner of the General Education Board requesting information and advice on establishing a two-year medical course at Trinity. Abraham Flexner received knowledge of Few's letter from his brother, inquired about the financial resources of the College, and thereafter discussed the prospects of establishing a medical school at Trinity with the General Education Board. The combination of these factors prompted Few in 1918 once again to consider building a medical school in Durham.

Negotiations were kept private, yet broad. William P. Few consulted Abraham Flexner, Benjamin Duke, George Watts and John Sprunt Hill, Watts' son-in-law and trustee of the University of North Carolina. The University was asked to participate in establishing the medical school which, when completed, would provide clinical instruction for its two-year medical students. President Few felt Flexner could be convinced that Durham and its surrounding areas provided an adequate population base for the project and therefore, should receive a grant. He wrote C.W. Toms, the first Superintendent of Durham public schools, whom Duke later brought to New York and who became a close business associate of the tobacco magnate. Toms served as a confidential mediator between Duke and Few. With James B. Duke's support, Few thought matching the Rockefeller grants could be achieved.

Amidst the flurry of events, George W. Watts died of stomach cancer. Although Mrs. Watts, his second wife, expressed eagerness to continue the project and promised President Few $1,000,000 towards a $3,000,000 funding campaign, precious time had been lost. John Sprun Hill, assuming the presidency of Watts Hospital, did not turn the tide away from the University of North Carolina. The president of the University, H.W. Chase, proposed expanding the school's two-year course to four and building the necessary hospital. The governor endorsed the idea. The State Medical Association recommended the state finance the cost of constructing this desperately needed hospital and medical school. The trustees of the University worked rapidly to gain the support of national medical authorities for a four-year school with university connections, which in fact, was the pattern based on the Johns Hopkins model used by Flexner in 1910. When word leaked out that the General Assembly might allocate funds for a medical school, civic rivalry — so entrenched in the history of North Carolina's cities — surfaced and eventually led to the defeat of the entire plan.

Charlotte physicians wanted to locate the medical school in their city, since they had lost their institution after publication of the Flexner Report. President Chase continued to argue that connection to the state university would be best. Wanting North Carolina to obtain a four-year medical school and also utilize the support of the General Education Board, William Few felt caught in the middle. President Few proposed to Chase that the University and Trinity combine efforts. The medical school would be built at Trinity; the board of trustees would be equally represented by both Trinity and the University of North Carolina. Davidson College and Wake Forest College were asked to participate. The medical school would then be linked to both UNC and Trinity in addition to having access to Watts Hospital. A $4,000,000 state bond plus matching funds secured by President Few would finance construction and provide an endowment. The University trustees voiced their approval of the plan, but after caustic attacks from the press when the idea was released, Chase and others backed away from Few and reformed their own camp.

President Few's cooperative plan never materialized. The University trustees announced their decision to build their own medical school but ranked it so low on their projected priorities list that the issue never gained much credibility or support. Knowing that his idea would not surface again, Few wrote Abraham Flexner, Benjamin Duke, and C.W. Toms, expressing the reasons the plan had failed. If a medical school was to be built in Durham, Few wanted it to part of Trinity. He hoped Toms would provide some insight to decisions James B. Duke made concerning Trinity. In March, 1922, Few got his answer. After meeting with Duke at his request, President Few was certain that Trinity would build its own medical school in the "development of our enlarged institution". President Few's energies were not in vain, as he said, "It kept the road open for a first-rate School of Medicine later on, and it put Mr. James B. Duke on his mettle."

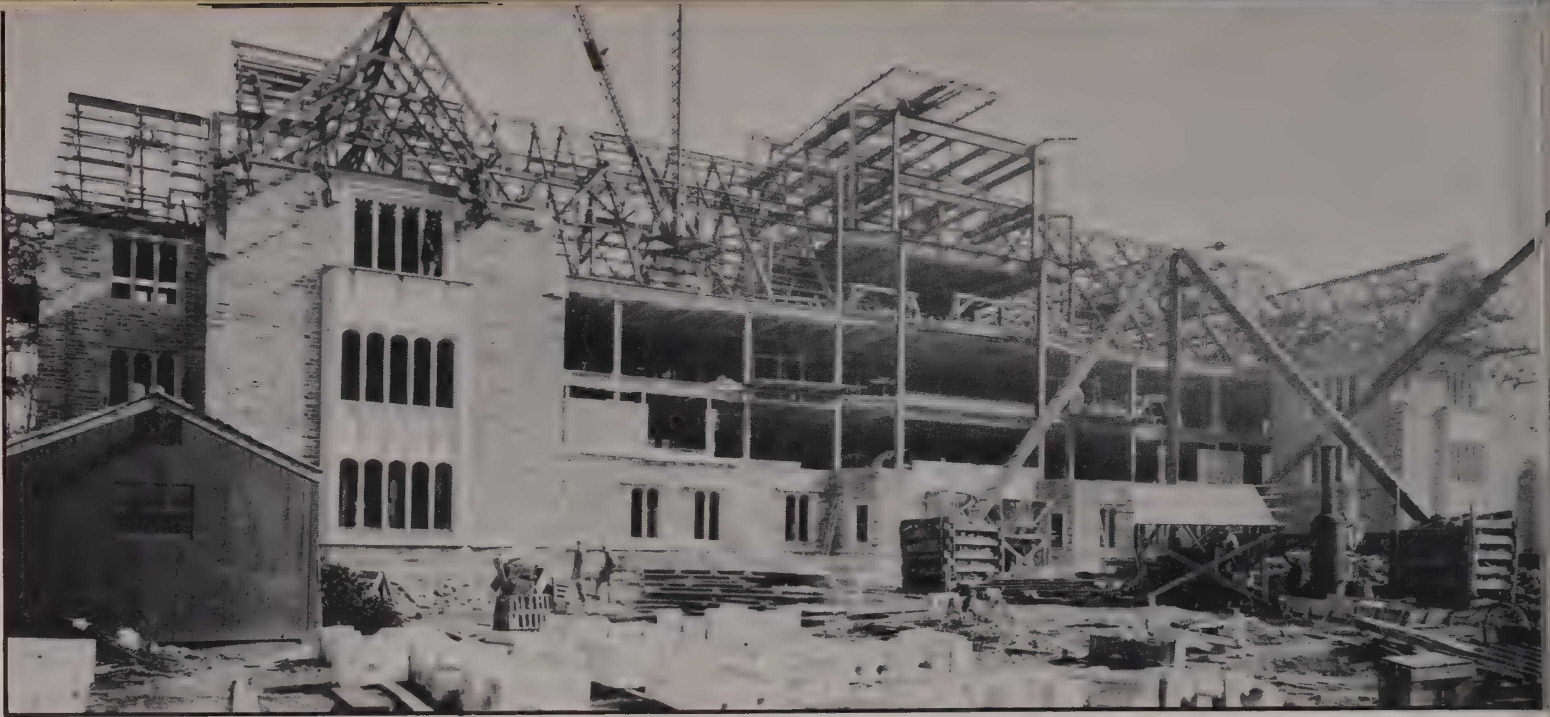
In 1922, James B. Duke's investments in water power began to pay high dividends. During the previous six years, Few knew of Duke's thought to expand Trinity to a university and continually pressed the tobacconist to consider including a medical school as part of that expansion. When Duke was ready to organize his philanthropic gift, President Few presented him with a guide to the institutional change which Duke later followed almost to the letter.

Duke would not confine his gifts to Trinity College alone, but follow a pattern of giving set down in 1890's by his father and brother, Benjamin, which included churches, preachers, colleges, orphanges, and hospitals. Washington Duke had given $3,000 to Watts Hospital. In addition to the amount contributed to first build Lincoln Hospital in 1901, Benjamin and James B. Duke gave $75,000 to rebuild it in 1924, yet J.B. Duke wanted his foundation to reach beyond the limits of Durham. The two Carolinas became the beneficiaries of Duke's investments.

The need for physicians in North and South Carolina had never abated. In 1923, compared to a national average of one doctor to every 724 residents, North Carolina registered one physician to 1150 inhabitants, South Carolina, one to 1231. At the request of J.B. Duke, his secretary, Alexander H. Sands, investigated ways to alleviate the problem. Sands contacted William Few for help; Few sought the assistance of Watson S. Rankin, Secretary of the State Board of Health. They concluded that to prevent young doctors from migrating to urban centers, hospitals must be built in rural areas. Physicians could no longer practice medicine or perform surgery without such facilities, yet most communities were too poor to finance their construction alone. Assistance would be needed, but only to the extent that still left each area principally responsible for the financial well-being of the hospital.

James B. Duke gathered together his close business associates and his lawyer, William R. Perkins, at his home in Charlotte, North Carolina, on December 1, 1924, to discuss the details of the foundation he planned to create. Each section of the draft Perkins had prepared was then analyzed fully. After three days, deliberations ceased. In the meantime, Perkins drew up Duke's will. Duke announced the designs of the Duke Endowment on December 11, 1924. As beneficiaries, he named churches, preachers, orphanages, colleges, and in particular, Trinity College, but one of the most far-reaching aspects of the Endowment would be the Hospital Section, designed to assist communities in building hospitals, and hospitals in financing charity care. To this section Duke allocated 32 percent of the Endowment securities and later in his will bequeathed 90 percent of his residuary estate which probably equalled the original $40,000,000.

Trinity College received $6,000,000 toward building costs and 32 percent of the Endowment holdings when its name was changed to Duke University. President Few immediately began redesigning the academic structure, and hiring new department heads. With the assistance of Horace Trumbauer, an architect who drew up the plans for the impressive Gothic buildings, J.B. Duke purchased land and surveyed the early construction. His unexpected death in 1925 from pernicious anemia prevented him from seeing his last dream come true. The mystery of the medical school and hospital were finally unveiled. The future of the University and especially its medical department now rested on Few, since he was left to select its new Dean, who like all other deparment heads would have full control in building, equipping, and hiring the faculty.



Construction of Duke Hospital and Medical School, entrance main quadrangle

Note the railroad tracks built to transport the stone from a nearby quarry

Duke Hospital and Medical School almost finished, 1927

In locating a candidate, Few sought the advice of Dr. Buttrick from the General Education Board who placed him in contact with William H. Welch, the original designer of The Johns Hopkins Medical School and Hospital. After lunch with Wilburt Corbett Davison, a pediatrician and the Assistant Dean of The Johns Hopkins School of Medicine, Few contended that Welch chose candidates well, but Davison waited almost a year before Few extended the offer. With a reputation for thoroughness and exactness, Few wanted to investigate all possibilities. The reply Davison sent expressed his eagerness to begin creating an institution free from ingrained tradition. Time had not dampened Davison's enthusiasm. At a salary of $11,000 a year, the new Dean of Duke Medical School began work in 1927.

Davison was born in Grand Rapids, Michigan, on April 28, 1892. As the son of a Methodist minister, he moved frequently, but would not leave home before experiencing rigorous academic discipline. When Davison was injured playing football and confined to his house, his father arranged for him to study Latin and Greek under a Harvard graduate. The program consisted of six hours of reading and two hours of quizzing — six days a week. Davison graduated from Princeton in 1913 earning academic awards and a Rhodes Scholarship. In September he sailed to England to study at Oxford University.

Davison's European experience affected his approach to medical education. With a catalogue of The Johns Hopkins Medical School in hand, he mapped out his first two years at Merton College; Sir William Osler, Regius Professor of Medicine and Dean of the medical school, gave his stamp of approval. With this action, Davison came to the attention of the renowned European physician. Osler invited the young American to informal gatherings in his home, where he lectured on the history of medicine. As a pediatrician, Osler supervised Davison's work on the wards, always demanding excellence and dedication. Davison's first publication or original research stemmed from investigations conducted under Osler's suggestion. After recieving a B.A. at Oxford in 1915 and a B.Sc. in 1916, Davison sailed back to America believing three things integral to any medical education: individual initiative in designing one's own curriculum, laboratory research, and a close contact with professors.

Davison entered the fourth year of The Johns Hopkins Medical School on the recommendation of Osler himself. He chose pediatrics as a specialty, trained under Dr. John Howland, pediatrician-in-chief at The Hopkins Hospital, and was once again subjected to rigorous clinical training and academic discipline. When the United States declared war in 1917, Davison secured an early graduation and entered the Army, eventually landing back in England. Upon his return to the States in 1919, Davison entered The Hopkins again, only this time in a position Howland arranged at the children's clinic of The Johns Hopkins University Hospital.

Davison served in a teaching and administrative position during the next eight years, 1919-1927. In this period of time, he published 36 articles and two books. Both his thoughts and writings reflected careful consideration of changes in medical school curricula and admission procedures. When interviewed by Few, Davison had earned distinction for innovating ideas and administrative experience as assistant Dean of The Johns Hopkins School of Medicine. Davison was bred in The Hopkins system and was familiar with its faculty, medical residents, and students. These two conditions would help shape the future of Duke University School and Hospital.

Wilburt C. Davison met the challenge of building a medical school and hospital, selecting a faculty and nursing staff, equipping the hospital, designing the curriculum, and establishing all fundamental policies with ingenuity, skill, flexibility, advice from leaders in each field, and most importantly, a belief in excellence. The task was awesome, but Davison was guided by the ideal of making the Duke University Medical School "better than any other institution in the country." As he told members of the Rotary Club when he unfolded his plan for the school in 1927, J.B. Duke communicated to him that it "not only equal but surpass any other medical institution in the United States." Davison believed the opportunity for this to occur was unprecedented because there did not exist any opposition from a previously established institution, the school would always remain abreast of the medical needs in the two Carolinas through its connection with the Endowment Hospital Section, and thirdly, the physical equipment was "the best" he had "seen in this country or abroad". Yes, money could provide a foundation, but the shape the medical school and hospital would take in the years ahead stemmed from the fact that Davison came to the University, as Few stated, with an "absolutely free hand" in planning and organizing the medical school and a commitment to the new scientific approach to medical education.

Wilburt C. Davison in 1927 when named Dean of the new medical school

Davison's first responsibility rested in choosing an architectural plan for the hospital. With the advice of Trumbauer and Winford H. Smith, director of The Johns Hopkins Hospital, who was knowledgeable in hospital architecture, Davison decided to adopt a plan used by several leading hospitals in the country, The Hopkins not being included. Departments closely associated on the basis of their function were located near one another, e.g., surgery and pathology. Services used by several departments would be place equidistant from all, as in the case of X-ray. Surgery and medicine would be separated.

Success for his new ideas on the curriculum depended to a large degree on support and cooperation of the physicians in North Carolina. Davison proposed to accept students with a minimum of two years of college training and then graduate them from the medical school in three years instead of the standard four. He proposed a quarter system broken down into 11-week sessions, the fourth session to be held during the summer. If students wished to graduate early, they could continue their education throughout the entire year. Davison maintained this condensed schedule would lower the average age of graduates from 26 to 22. Adopting a more flexible curriculum like The Hopkins implemented in 1927 would enable Duke medical students to plan their education through elective options. The success of this system depended on selecting top students. Applicants would be required to fulfill basic undergraduate science requirements, submit letters of recommendation, and if the applicants looked promising, meet with a physician acting as a regional representative for an interview: Davison stressed quality, not quantity. Classes would be limited to 50 students; if standards were not met, then the class would not be filled. Since the students would be able to apply classroom instruction immediately in a clinical setting, Davison believed the school was "able to teach students medicine here" and know they would "go out into the country to practice." The proposal met with oppostion from medical educators in the state because they feared Duke would demand that they upgrade their standards or force them out of operation. Davison treaded in rough waters. His ideas were innovative, but in time these physicians would "say that we in no way consider that we are in competition with you." In reaching that point of cooperation, Davison learned the necessity of soliciting the advice of the state's medical practitioners.

The most important decisions still remained: defining the departments in the medical school and hospital, selecting faculty to head each area, agreeing on salaries and responsibilities, and hiring a nursing staff. Davison felt support from the state's medical community vitally important when choosing a staff because both groups would have to work together for Duke to become effective as a regional referral center, yet Davison also believed in giving the division chiefs complete flexibility in building their departments. He had one restriction — money. The people he thought to be attracted to Duke would either be young and amenable to a low salary or from the South and interested in returning to the area; all would have to be energetic and highly qualified, which meant trained as research scientists. Davison recruited nearly his entire faculty from The Johns Hopkins staff. This common institutional base ensured an exposure to the new educational pattern of integrating scientific investigation with clinical teaching as well as reducing unavoidable conflicts in establishing a new school. Davison set a policy from the beginning — all full professors must approve the next appointment.

Staff, Duke University School of Medicine, Nursing and Dietics and Duke Hospital. July 19, 1930 (two days before the opening). **L. to R. First Row:** Dr. Bellows, Mrs. Martin, Mrs. Sykes, Miss Baker, Miss Patrick, Miss Laxton, Dr. Sweet. **Second Row:** Dr. Eagle, Dr. Alyea, Dr. Forbus, Miss Batcheldor, Miss Floyd, Miss Nelson, Mrs. Lawlor, Miss Muller, Dr. Amoss. **Third Row:** Mr. Smith, Dr. Perlzweig, Dr. Oates, Miss Robinson, Dr. Hansen, Dr. Johnston. **Last Two Rows:** Dr. Gardner, Dr. Ziv, Dr. Jones, Mr. Reese, Dr. Magill, Dr. Craven, Mr. Ward, Dr. Davison, Dr. Taylor, Dr. Hart, Dr. Reeves.

Harold Amoss headed the list of new faculty as Professor of Medicine. Both Few and Davison knew Amoss; Few considered him as a candidate for Dean of the medical school; Davison worked with him at The Johns Hopkins where Amoss was Associate Professor of Medicine. His speciality was infectious diseases. He had worked for ten years at the Rockefeller Institute of Medical Research under Simon Flexner. In 1922, he joined The Hopkins staff and stayed there until Davison sought first his advice on planning and equipping the new hospital, and then his acceptance to direct the Department of Medicine. Although Amoss was Davison's senior by six years, the opportunity to build a program from ground up was too appealing to decline. The budget and blueprints seemed reasonable to Amoss. He signed on.

Amoss received the list of candidates for Surgery from Davison. A Southerner was selected. Julian Deryl Hart, a native of Georgia who claimed Emory University as his alma mater for two degrees, was finishing his eighth year of residency at The Johns Hopkins where he had also recieved an M.D. Wiley D. Forbus joined this nucleus as Professor of Pathology. Graduating from Washington and Lee, Forbus entered The Hopkins Medical School, received an M.D., and was currently working as an Associate Professor of Pathology. Since Amoss, Hart, and Forbus were still at Hopkins, Davison used them to recruit people from his list to fill the remaining positions. William A. Perlzweig, Professor of Biochemistry, Edwin P. Alyea and Watt Weams Eagle, instructors in Urology and Otolaryngology, left The Hopkins for Duke. Davison picked three of The Hopkins Hospital's top nurses, one each from pediatrics, the operating room, and dietetics. In fact, the chief nurse (probably the crucial staff position), Miss Bessie Baker, had been Assistant Superintendent of Nurses at The Hopkins. The instructor in Orthopedics, Alfred R. Shands, Jr., had trained at The Hopkins. Gradually Davison extended his scope, selecting people from places throughout the country, yet overall his staff was so highly concentrated with Hopkins-trained doctors that some say Duke is the most complete "clone" of that institution in existence.

The new Dean's job had merely begun. Equipment had to be selected, ordered, purchased, and then arranged in its proper place. Davison requested inventories of equipment from Vanderbilt, Rochester, and The Hopkins. From these lists he compiled cards stating what each room would contain. Advice from other administrators helped Davison equip laboratores which were not present in other hospitals. Books for the library were ordered in the same fashion. Davison, Miss Judith Farrar and Mrs. Mildred Farrar wrote out lists of all the books owned by The Hopkins, Rochester, Vanderbilt, and Boston medical libraries. Friends and specialists rated each selection as "necessary", "desirable", or "useless". They sought the lowest price for all books sending bids to dealers throughout the world. Quality if not quantity, the "necessary" and "desirable" books received frist priority on purchase orders.

One major problem remained in the planning — money. Altough the Endowment allocated $4,000,000 for buildings, Davison and Few refused to open the medical school without

Dr. George R. Minot, Dr. Harold Amoss

sufficient funds to operate a four-year curriculum. As projected, the cost could not be met without financial assistance. Davison presented Abraham Flexner of the Rockefeller Foundation with hard cold numbers, defining the school's need; Few presented a written report stating the University's position to insure financial stability. Few wanted the requested grants less for the money than for the principle; he feared that foundations would refuse Duke assistance because of one man's gift. For Davison the acceptance by the General Education Board resulted in a sigh of relief. He sent out 500 applications for medical school in 1929; 1,000 more were printed. The projected date of opening was set for the fall of 1930. With Forbus and Hart in Baltimore, Davison faced the responsibility of screening candidates alone; in addition, the medical school faculty had to be hired.

As the hospital structure rose, so did the community's curiosity. The buildings covered four acres of land, housing outpatient services, emergency room, administrative offices, male medical wards, dining rooms, and the amphitheater, all on the first floor. Above this, patient rooms and wards were located, the wards being divided into black and white sections. On the third floor, the male surgical wards and physicians' offices connected with pathology and the medical school. On the top sat the operating rooms, the obstetrical, gynecological, and female surgical wards. Davison set prices at $3.00 per day for ward beds, $4.00 for semiprivates, and $5.00 to $9.00 for privates. These prices did not include x-ray and laboratory charges. Outpatient clinics opened four and half hours each day, blacks and whites having separate hours. Each patient was expected to pay part of the projected expense ahead of time. These were the days of the Depression, but the means Davison and others in the Durham community (in particular George Watts Hill, Sr.) proposed to alleviate the financial burden of increased charity care would be released to the public after three years of operating the facility.

The hospital opened for service on July 21, 1930. Within two months, more surgery was performed and people admitted than anyone had ever expected. Policies which produced some controversy and concern from the beginning were the requirements for the faculty: all were hired on a full-time basis, they were prohibited from having private practices, each faculty member received a salary, and all surgical and medical fees went directly to the hospital. This arrangement based on the Hopkins experience promised to provide instructors with time for research and teaching, yet the low salaries warranted an adjustment. Members of the medical faculty were permitted to charge a fee under the condition that all of their time be spent in the hospital. Unfortunately, the Depression choked off lucrative rewards of this policy. Few people registered as private patients.

Davison selected 30 first-year students and 18 third-year students from 3,000 applicants — quality, not quantity, or so he thought. The smaller classes provided an opportunity to develop close individual teaching methods. At the end of the first two quarters most of the students received warning to improve their performance, otherwise they would be asked to leave.

Community hospital for the white doctors in Durham, Watts Hospital, ca. 1930

Davison controlled the funding of each department as well as all fundamental procedures. He alone sat on every committee and chose the first imcoming medical school class. Davison had deliberated a long time before deciding to accept both the position as Dean of the Medical School and Administrator of the Hospital. In the early days of operation, his joint position reduced conflicts and provided consistency. Davison solicited and received support from Durham's physicians. But as one of the city's leading businessmen remembers, the Duke phsyicians were always cliquish probably because of the demands of designing programs, their Hopkins connection, and full-time positions which restricted mingling with the doctors in the area; nevertheless, when the doors opened, everyone breathed with excitement. Duke was new.

On the formal dedication, held April 20, 1931, over 850 physicians from throughout the country and Canada plus representatives from 170 colleges, universities, and foundations in the United States attended the ceremonies. Dr. William H. Welch, the leader in American medicine, spoke. This "silver haired and impressive" gentleman declared that the dedication of the medical school and hospital was "one of the most significant advances in the history of medical education in this country." Yes, unification of a medical school and hospital had become essential to progress in the prevention of disease, but this statement would be tested in numerous ways during the next fifty years as the economy, the profession, the public, and the federal government challenged the concept of medicine and medical education time and time again.

Pamela "Preston" Reynolds

Dedication of Duke University Medical School, April 20, 1931. **L. to R.:** Dr. William Welch, Johns Hopkins University; Dean David Edsall, Harvard University Medical School; Director Lewis Hill Weed, Johns Hopkins School of Medicine; Dean Wilbert Davison, Duke University School of Medicine; Dean Elbert Russell, Divinity School, Duke University; President W. Preston Few, Duke University; President Thurman Kitchin, Wake Forest College.

Bibliographical Note

To date James F. Gifford, Jr.'s book, *The Evolution of a Medical Center: A History of Medicine at Duke University to 1941* is the most complete study of the origins of Duke Medical School and Hospital. Fully documented, this book serves as a valuable resource. Wilbert C. Davison recorded the numerous steps taken in establishing the medical school and hospital in *The Duke University Medical Center, 1892-1960.* For Durham history, the standard refernce is William Boyd's book, *The Story of Durham: City of the New South.* An earlier description of the city is *History of the Town of Durham, N.C.* (1884) by Hiram Paul. For a succinct description of the growth of the American Tobacco Company see Patrick G. Porter, "Origins of the American Tobacco Company," in *Business History Review* 43 (Spring 1969). Robert F. Durden's work, *The Dukes of Durham, 1865-1929,* is the most fully documented study of the Duke family and their business and philanthropic activities. Most of the primary source material, e.g. newspapers, Minutes of City Council meetings, cemetary records, health officers' reports, and manuscripts were used in my Duke undergraduate history thesis, "The Interaction Between a Philanthropist's Dream and Public Attitudes: Watts Hospital, 1895-1976" and will be incorporated into the book on Watts Hospital I am currently writing.

P.P.R.

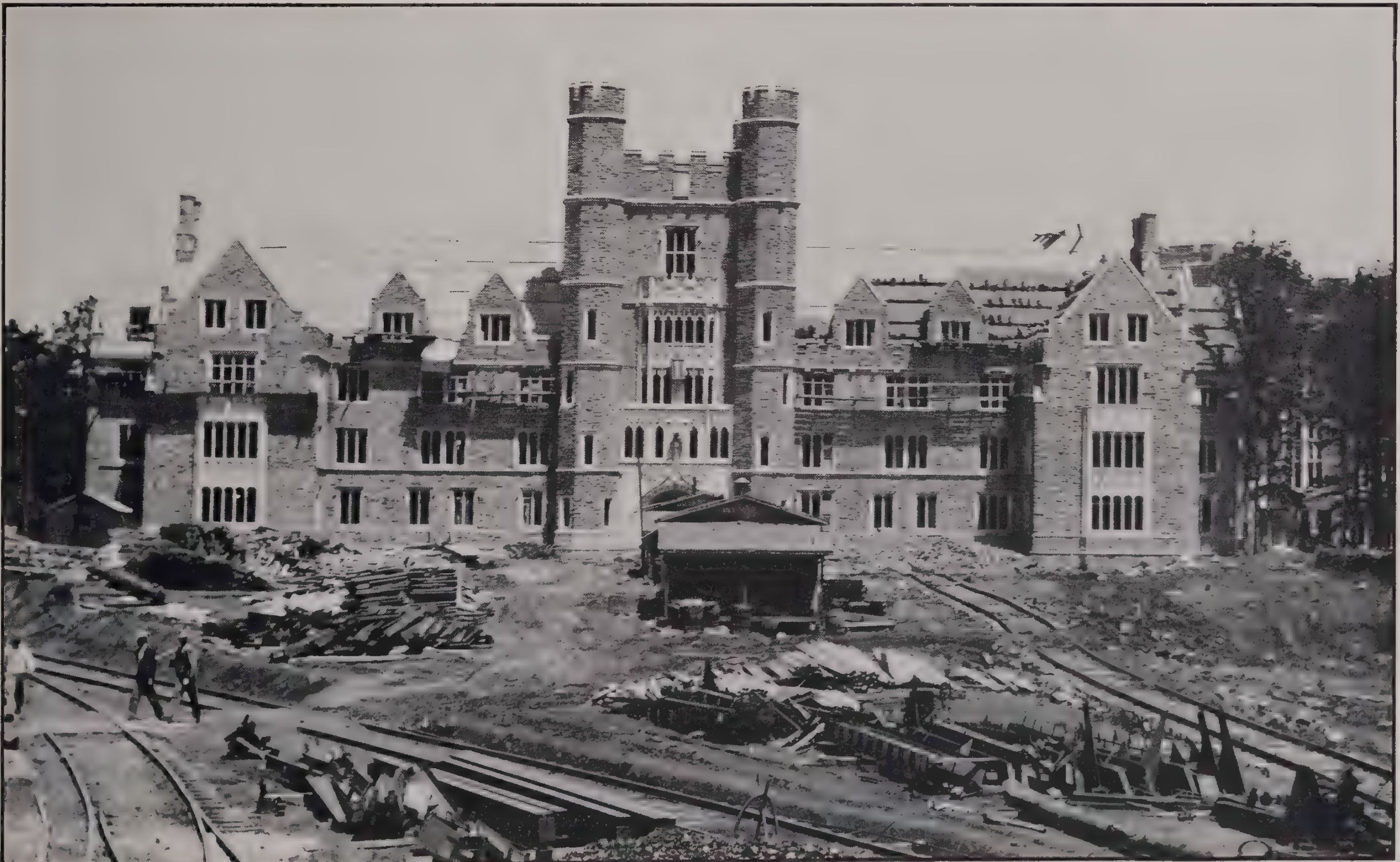
THE GROWTH OF A MEDICAL CENTER, 1930-1965

When Wilbert C. Davison came to Durham in 1927 from Johns Hopkins to begin work on the new Duke University Medical School and Hospital, he was greeted by an enormous task. He had the job of designing a new curriculum, gathering a faculty, and to a large extent, designing the building and general organization of the complete medical complex, over which he took total charge. His proposals appeared radical to many, but they were developed out of a combination of a close friendship with William Osler and many years at Johns Hopkins, the post-Flexner standard of excellence in medical education, and a prodigious charge by James B. Duke to attain recognizable excellence quickly and to cooperate with the Duke Endowment in raising the standards of medical care in the Carolinas. Time proved Davison to be quite an efficacious gentleman.

On July 1, 1930 the new building was completed, and on Sunday, July 20, a very hot, humid North Carolina summer day, the hospital was opened to the public. Davison "lost 6 pounds and ruined a white linen suit showing visitors through the building and repairing overloaded elevators."[5] The next day the hospital was opened to patients. On October 2, 1930 thirty first year and eighteen third year medical students began their studies at Duke University School of Medicine. The rest is history, so to speak. Let's examine it briefly.

As if it were not enough just to overcome the many and varied problems of opening a new medical school and hospital in a region that wasn't sure it needed or wanted them, Duke also had to overcome the additional hardships engendered by the post-World War I cost increases and the great Depression. These difficulties were met with a characteristic energy and ingenuity by all involved, but especially by W.C. Davison.

Wilburt C. Davison, Dean



Construction of Davison Building, Duke Hospital, late 1920's

Hospital entrance, 1931

Medical clinic, May, 1941

The hospital had an ample patient load from the start, but only a relatively meager staff and facilities. Due to the economy of the times, a major problem was the inability of patients to pay for services. Duke outpatient clinics offered high quality, low cost care, but the demand quickly outstripped the resources. The result was, among other things, a tremendous strain on doctors in terms of time, consultations, and bill collection. The pressures led to the formation in 1931 of a very successful cooperative venture, first proposed by Deryl Hart, namely, the Private Diagnostic Clinics. The new arrangement allowed for study/research or leisure time, income security, and freedom from collection responsibilities for the doctors. It also freed the clinical departments from financial dependence on the University, while at the same time insuring quality care for patients. Consultation was encouraged by keeping fees low and dividing whatever was collected according to the proportion each provider would have received had the total bill been paid.

The Department of Internal Medicine Fund, created by Chairman Fredrick M. Hanes, was another beautifully successful, cooperative effort. It involved pooling the funds collected, extracting overhead costs, and redistributing the remaining money based on the proportion contributed by each member in the previous year, with a provision to cushion the effect of any drastic changes. It also provided for research and salary funds to promote original investigation and assure that Duke could complete for top quality faculty members.

Dr. Deryl Hart

A number of other programs were introduced in the first few years to deal with the financial difficulties. These included a flat rate scheme which tended to distribute the costs of care more evenly throughout the population and led to an increased percentage of collections; cooperative plans, which enlisted the aid of surrounding communities, including families and friends of patients, church and civic organizations, and especially local governments in financing medical care of their indigent population; and the Hospital Care Association, a Blue Cross associated insurance plan which helped North Carolina become one of the first states where Blue Cross was available everywhere. The most important of all the efforts, however, was the P.D.C. By providing the funds to attract and secure the best medical staff in the region for Duke, it insured the success of all the experiments and led to the day when the providers at Duke could assume the financial responsibility for their future growth and expansion.

Dean Davison was no less ingenious in dealing with legal problems. Even then an occasional patient would sue the hospital. Davison had noted in the 1927 yellow pages that there were twice as many lawyers as physicians in Durham, so he obtained malpractice insurance even before the hospital opened. He was also adept at avoiding time consuming impositions by the law. A pressing engagement once forced him to avoid a subpoena. After his secretary recognized that the deputy sherrif was delivering a subpoena, Davision escaped through an open window thus eluding the sheriff and catching his outgoing flight.

"The primary objective of James B. Duke's philanthrophy was to improve the quality of medical care throughout the Carolinas."[5] As Dr. Watson R. Rankin, director of the hospital section of the Duke Endowment pointed out, "adequate medical care rested on a tripod of services: physicians in adequate numbers throughout the area, hospital facilities, and nursing and technical personnel. Providing hospital facilities in rural areas was the best means of assuring all three." The Endowment provided financial support for charity care, statistical analysis of medical administrative operations as compared to other hospitals, and surplus funds to aid communities in building and equiping new hospitals.

Duke University School of Medicine and Hospital cooperated with the endowment in modernizing care by training the doctors, nurses, technicians, and administrators needed in new modern hospitals; sending consultants to other hospitals where inadequacies were noted; providing a pathology service that reviewed surgical performance in hospitals; and holding yearly three-day medical symposia for general practitioners.

Nurses' training was by far the largest of the auxillary training programs at Duke. Initially Duke offered a three year program of Graduate Nursing that led to the Diploma of Graduate Nurse, and a five year bachelors program in nursing administered through the hospital.

Dr. George Minot and Dr. Fred Hanes, November, 1940

When the hospital opened in 1930, Duke offered a program for dieticians approved by the American Dietetic Association and started an eighteen month program for laboratory technicians for which no accrediting agency existed at the time. In addition, Duke began the first program in hospital administration in the country. The philosophy of learning by doing permeated all of these programs. Hospital service was the core of the curricula. Because of this and the fact that a large percentage of the graduates of these programs stayed at Duke after graduating, the programs made invaluable contributions to the hospital during the first few years of expansion. After this initial period, the graduates began to spread to other hospitals in the region.

The influence of the success of the total Duke program was not only regional, however, but also national. The government was increasingly involved in health care during and following the Depression, culminating in the Hill Burton Act which gave the government responsibility for the expansion of the nation's health care facilities after World War II. The Duke experience did not go unnoticed, and many of the provisions of the final bill reflected the principles of the Duke Endowment and its dealings with the communities of the Carolinas.

Like many other Hopkins-trained administrators, Davison drew most of his faculty for the new medical school directly from the Hopkins staff. Even his faculty chosen from other institutions usually had worked at Hopkins, making Duke "the most complete colony of the Hopkins."[5] The selection process Davision went through is covered in more detail in the preceding essay and the following information is for the most part supplementary.

Davison's first appointment was for Professor of Medicine. He selected Harold L. Amoss, then Associate Professor of Medicine at the Hopkins. Together they chose Julian D. Hart for the Department of Surgery. Then the three of them selected Wiley D. Forbus for Professor of Pathology, and so on until the faculty was complete, including F.H. Swett in Anatomy, G.S. Eadie in Physiology, David T. Smith as Associate Professor of Medicine and head of the Department of Microbiology and Bayard Carter in Obstetrics and Gynecology. The average age of the first group in 1930 was just over 37 years. Dr. Amoss was the oldest and incidentally the only department head ever to resign. Almost all had a similar philosophy. Dr. Forbus summarized it thus:

". . . We felt that a medical school should not be a trade school in the ordinary sense of the word: not just an institution to train doctors to serve individuals. A student should develop a concept of the Science of Medicine as well as simply learn what can be done for the patient. Biological phenomena of all sorts should be studied whether or not they are applicable to current therapeutic procedures. Education should be a stimulus for the pursuit of further knowledge, not just the mastery of the body of classic and current medical knowledge. The student must be trained to make a contribution to science as well as to enter into a rational practice of medicine."[2]

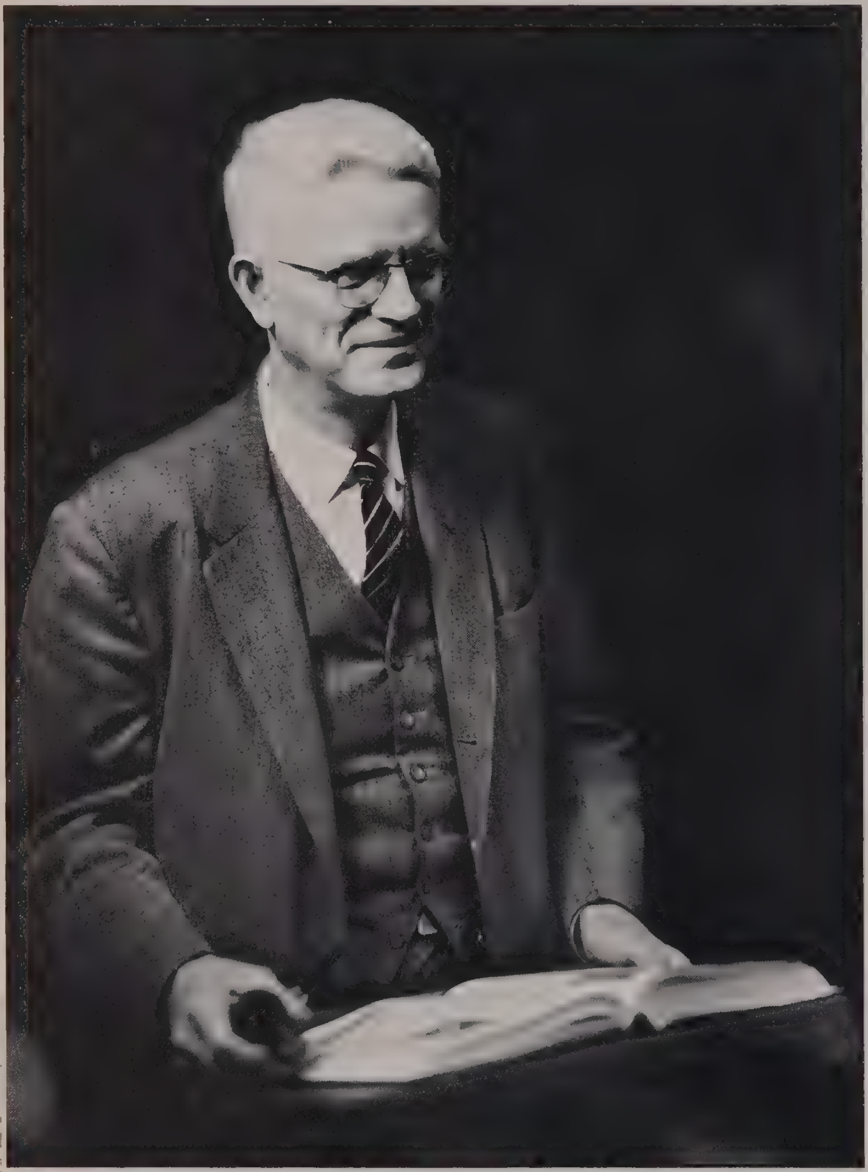
Dr. George Minot on left with Dr. Harold Amoss. ca. 1932

Dr. Deryl Hart, on left, with Dr. Clarence Gardner

Dr. Wiley Forbus, 1964

L to R, Dr. Roy T. Parker, potrait of Dr. Carter, Dr. Bayard Carter, and Dr. Paul Simpson

Unfortunately, all was not harmonious in the original cast. Eventually, a power struggle apparently developed between Davison and Amoss. Dr. Amoss was Davison's senior by 6 years and the only member of the young faculty to have held an appointment as Professor at Hopkins before coming to Duke. Ultimately the incompatibility led to joint resignations submitted by Davison and Amoss. Dr. Amoss's was accepted and Davison's rejected. Davison remained as Dean, and D.T. Smith was provisional Chairman of the Department of Medicine for one year until Dr. Fred Hanes was appointed to the position.



D.T. Smith, head of the Department of Microbiology

Although the medical faculty is obviously the key to the function of a medical center, Davison felt that "the chief nurse is the most important person in the hospital."[1] Davison made inquiries throughout the nation. Everone agreed that he should try to get Ms. Bessie Baker, who had been Chief Nurse of Base Hospital No. 1, the Johns Hopkins unit at Bazoilles-sur-Meuse, AEF in WWI. She had a great sense of humor; for example, in WWI when a group of enlisted men (Johns Hopkins Medical School seniors) moved a latrine in which she was sitting, she took it in stride and did not think of reporting it.

Bessie Baker was greatly respected at Duke and was unnerved but once, when her stiffly starched skirt sent a light aluminum chair in which she was attempting to sit sailing across the room, and her crashing to the floor. In 1938, after eight years as head nurse, she retired due to a severe case of shingles. Ms. Baker came out of retirement to serve in the Red Cross in WWII, but she met an untimely death when struck by an army car in June of 1942. Her last words reportedly were "I am glad that the driver was a major and not a private."[1]

Bessie Baker, Head Nurse

On October 2, 1930, 30 first year students and 18 third year students began their medical studies at Duke. James B. Duke requested "that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination, and application evincing a wholesome and real ambition for life."[5] Dean Davison felt that the ideal medical student and physician should have all of the following virtues: honesty, intelligence, memory, accuracy, application, intellectual curiosity, chairty, faith, humility, hope, compassion, and patience. He said the master word of medicine is work. He was not kidding.

The students found the work hard and the standards high. After two quarters, almost half the first year class received strong warnings to improve markedly. Most of the other first year students and a few in the third year class received mild warnings. Given the choice between proctored exams and an honor system, the students chose the latter. One in four of those admitted for the first five freshman classes failed to finish the medical course at Duke, most because they were asked to withdraw by the faculty.

Initially, a large majority of students were from the South, including many from small towns and rural areas. As the reputation of Duke grew, the proportion of rural students fell, until in 1940 they made up only 4% of the class. Over this same period, students had increased their premed education from two or three years of college to the equivalent of a bachelors degree. At

Duke medical staff in the old amphitheater October 4, 1950

the same time the failure rate also dropped significantly.

In the early thirities many medical students lived in what became Nott Ward. Most of the rest lived in dorms on West Campus, while the house staff lived in what became Meyer Ward. There was a large lounge in what eventually became the day room where a very used baby grand piano resided. The usual around-the-clock craps game was played there too.

Along with the other problems inherent in beginning a medical school, Duke was faced with the dilemna of what to teach and what to skip. The Hopkins-influenced liberal curriculum that Davison introduced pre-supposed that self-education was best. In an era of rapidly expanding medical knowledge, it was impossible to teach everything, and there was no way of knowing what directions the students would take after medical school. Davison felt that students needed to learn the fundamentals of the science and art of medicine, the habits of self-study, and the capacity for observation, analysis and deduction. The curriculum that he offered devoted about half of its time to the acquisition of fundamental knowledge through required courses, while the remainder was devoted to elective pursuits, including courses, research and independent study. The only stipulation was that the student demonstrate wise use of the elective time.

Students were encouraged to spend time away from Duke at other institutions in the U.S. and abroad. In support of this "liberalized curriculum" Davison argued that the curricula of most medical schools were overcrowded with required instruction in numerous subjects. He also felt that most students know by the second or third year of medical school which type of work they expect to do. The new curriculum, he felt, would allow them to pursue their interests and provide them a much more useful educational experience. As will be seen later, this same philosophy led, many years later, to the introduction of another "liberalized curriculum," strikingly similar in many ways to Davison's original offering.

The curriculum was based on a quarter system rather than semesters and designed so that students could go summers if desired. Thus they could get out in three years instead of four. Davison also wanted to allow carefully selected students to enter medical school after only two years of undergraduate work so that their total time from high school to M.D. could be as little as five years.

The first two years were mostly preclinical sciences with emphasis on laboratory work, and students were encouraged to use texts and current journal articles to supplement their lab work. Lectures were considered secondary to the lab, and small group conferences were preferred. No numerical grades were given; the importance of written exams was minimized.

Before transfer from the lab to the wards, students were taught history taking and physical examination by the Department of Medicine. They had to demonstrate proficiency in routine lab procedures by taking written and oral exams.

Juniors worked as clerks on the wards, and seniors worked in outpatient clinics under conditions more like those of an office practice. On the wards students were responsible for histories, physicals, and laboratory work, and in the first few years when house staff were in short supply, the work load was extremely heavy, with as many as eleven new workups per day (the "good old days"?). Instructional clinics covered, over a two year period, all of the problems commonly faced by the practicing physician. The students were required to present only a few patients and they were responsible for the relevant text and recent journal material on each. Evaluation of students was carried out chiefly on the wards.

Duke was the only school in the country to require two years of internship before awarding the M.D. degree. Seventeen others required one year. Despite vigorous protests by the first graduating class in 1932, students were awarded only certificates on graduation day to be returned and exchanged for degrees after the two year requirement was completed.

As for postgraduate medical education, Duke originally offered only straight internships because Davison felt that rotating internships did not give the doctor sufficient experience in any one field to be valuable. He felt that straight internships were the best preparation for the specialties and that combinations of straight internships in two or three fields were the best preparation for general practice.

Interns were responsible for checking student workups and doing workups on patients not seen by students, as well as making the 24 hour decisions necessary for patient care. On difficult decisions the intern consulted the assistant resident who was responsible for a number of wards and oversaw the work of the interns and students. The assistant resident usually completed this segment of his training in 2 or 3 years before advancing to senior resident. It was the senior resident who "made it go." He planned the programs for the interns and assistant residents and was responsible for bedside rounds with the students, as well as the bulk of the basic clinical teaching for students. Each week ended on Saturday with the clinicopathologic conference (CPC) which was religiously attended and frequently accented by fierce debate, unlike today's sedate conferences.

Medical education at Duke was characterized by a close association between the faculty, house staff, and students. Both staff and students were welcome at autopsies, which were performed in the pathology amphitheatre on the second floor, and at deliveries. The autopsies were usually like a CPC, and the staff was notified of them by the paging of "Dr. Rokitansky" on the P.A. system. The paging of "Dr. Phoenix" meant that a delivery was in progress.

Hospital teaching was the first priority of the faculty of Duke during the thirties. They felt that this not only met Duke's responsibility for improving medical care in the Carolinas, but also led to higher quality graduates by whom Duke would ultimately be judged. Learning by doing was the principle that united the curriculum.

Just as important as the organization of the curriculum was the attitude and example of the faculty, which at Duke was almost without exception biased towards specialization. The duke professors were all specialists themselves; the house staff were for the most part interested in specialty training; and Duke had only straight internships. Davison noted himself that residents already in specialty programs discouraged interns who showed an interest in general practice after internship. Residency programs were opening up all over the country, and it was well known that a specialist could look forward to earning more than a generalist, so the emphasis and orientation were toward specialization. Later on, another contributing factor to the increase in specialization by Duke graduates was the fact that a large proportion of the alumni were in the service during WWII. In the military they noted that specialists received higher rank and pay, which tended to steer them in that direction. Thus it is no surprise that greater than 60% of the students entering Duke during the thirties eventually entered into the practice of a speciality.

By the middle of the decade, with its clientel and professional staff growing and the graduates being well accepted into post graduate training programs, the Duke faculty began to delegate relatively more time to research, particularly to those medical problems peculiar to the Carolinas.

The original philosophy of Duke and the necessary schedule of priorities placed patient care and teaching above research. Paucity of patients, time, and money made initial research efforts relatively meager. However, it was accepted that a good teacher, in order to keep his own spirit of inquiry alive and to instill this enthusiasm into his students, must be involved in some original investigation. Thus the research pattern that emerged during the decade of the 30's was characterized by a melding of the clinical and basic sciences, each complementing the other toward the dual ends of generating new knowledge and solving the particular medical problems of the area and specific needs of the clinicians at Duke.

L to R: Dr. ?, Dr. Deryl Hart, Dr. Ed Alyea, Dr. Lenox Baker at 4th year class vs. staff softball game, ca. 1940

Medical research in the 30's was in two general areas. The first involved diseases caused by deficiencies in the body. Pellagra, being widespread in the region at that time, became a major research interest. Duke investigators were in the forefront among those responsible for the isolation and demonstration of nicotinic acid as the curative agent in the disease. The other major area was diseases caused by infectious organisms, and Duke's major contribution in this area was research on American blastomycosis or Gilchrists disease, which was particularly common in the South. In general, Duke researchers developed techniques enabling physicians to differentiate between fungal and tuberculin disease. Specifically, bacteriologist Donald Martin developed a complement fixation test for diagnosing Cilchrists disease, and Dr. David T. Smith showed the relationship between the allergic status of patients and their response to potasium iodide therapy. With his desensitization technique, Dr. Smith was able to tremendously improve that response to potassium iodide.

Dr. Bayard Carter and his staff in OB/GYN did some important pioneering work in determining normal vaginal flora and detecting and differentiating fungal and anaerobic organisms. This led to the ability to differentiate normal and diseased states and also to the development of effective therapies.

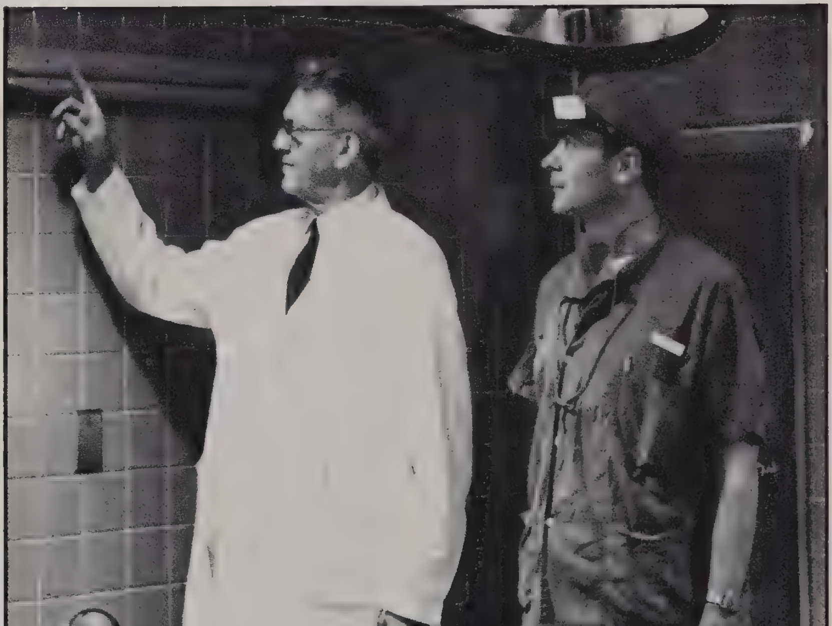
Dr. Edwin C. Hamblen did pioneering work in gynecologic endocrinology. On the surgical side, Dr. Deryl Hart in the 30's designed a system of bacteriocidal ultraviolet lights that tremendously reduced the incidence of post-operative infections, especially Staphylococcal, which all too frequently followed radical procedures and child birth.

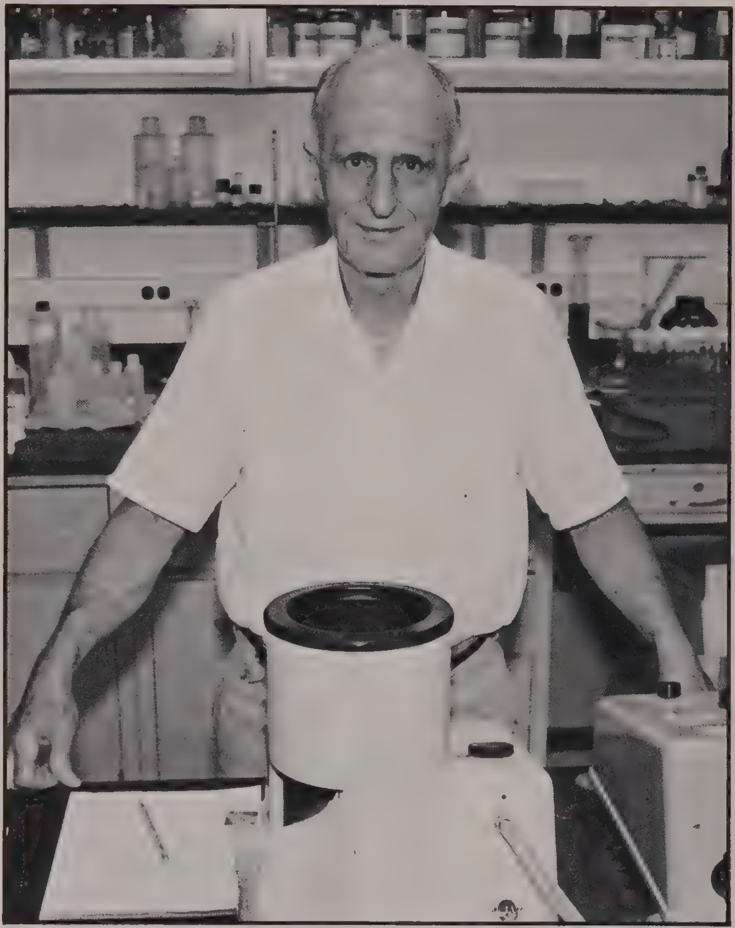
Dr. Bayard Carter

Dr. Rokitansky

Dr. Edwin C. Hamblen

Dr. Phoenix


Dr. Deryl Hart demonstrating UV lights



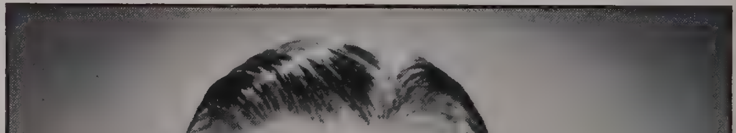
Dr. Fredrick Berheim

On the preclinical side, work in pharmacology by Dr. Fredrick Bernheim led to the development of para-aminosalicylic acid as a treatment for tuberculosis.

As the decade progressed, research began to take a higher priority at the University because the curriculum was becoming more solidified, classes were being filled, the patient census was approaching capacity and the house staff was growing by leaps and bounds. Also, as time progressed, industry, private foundations and the federal government began funding research projects that would eventually determine the direction of research and take the primary initiative out of the hands of the investigators at the University. An example of this is the work of Dr. Joseph W. Beard in the Division of Experimental Surgery. In the late thirties he received a substantial grant from Lederly Laboratories, a subsidiary of American Cyanimid Company, to develop a vaccine for equine encephalomyelitis. The successful vaccine that resulted led to the donation of profits from its use to the University, and thus a continuing source of funds was created. The work also attracted funds from the National Cancer Institute, which funded further work at Duke on equine encephalomyelitis and other work on tumor viruses.

Thus, during the Depression decade, research at Duke was primarily determined by the clinical problems, personal interests and previous experience of the investigators, the stage of the development of the hospital and medical school, and lastly by the availability of funds. The early research illustrates the predominance of the first two factors in the work of Carter, Hamblen, and Hart. But Beard's work presaged a new era in research as funding became predominantly external, and thus the directions of research became less and less determined by internal factors and more by external factors. As the larger funds of the government, industry and the foundations began supporting research, they also began to set its goals. For example, the

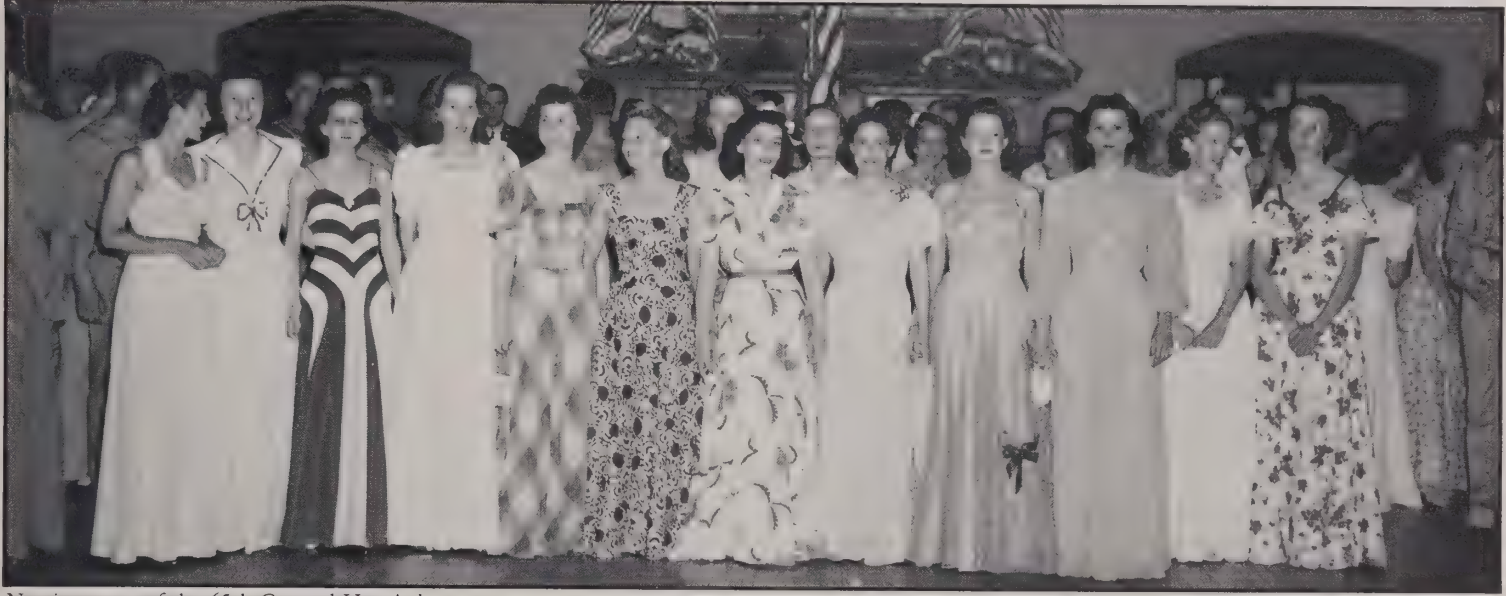
Dr. Joseph W. Beard



Dr. Clarence Gardner

NIH was a major funding agency and became very important in determining directions in research. The universities themselves, however, continued to be the basic research agencies.

When World War II broke out the medical faculty at Duke volunteered their services to the Surgeon General of the Army to set up a General Hospital unit similar to the N.C.-based Hospital #65 of World War I, which Dr. Hanes had commanded. Thus the 65th General Hospital was formed with Dr. Elbert L. Persons, Jr., Assistant Professor of Medicine, as Director and Dr. Clarence Gardner, Jr., Professor of Surgery, as the Chief of the Surgical Services. The hospital was staffed by Duke faculty and alumni who had at least one year's internship experience. The 65the General Hospital was eventually transferred to England for duty in the European theatre.


Nursing corps of the 65th General Hospital

Medical corps of the 65th General Hospital

65th Medical Corps camping on East Side Parking Lot — Jan 6, 1943

Dr. Bernard Fetter, picture taken either 1942 or 1980

Ten days prior to Pearl Harbor, Duke became the first school to adopt the Army-Navy specialized Accelerated Training Program. The class size was increased and accelerated summer courses were offered.

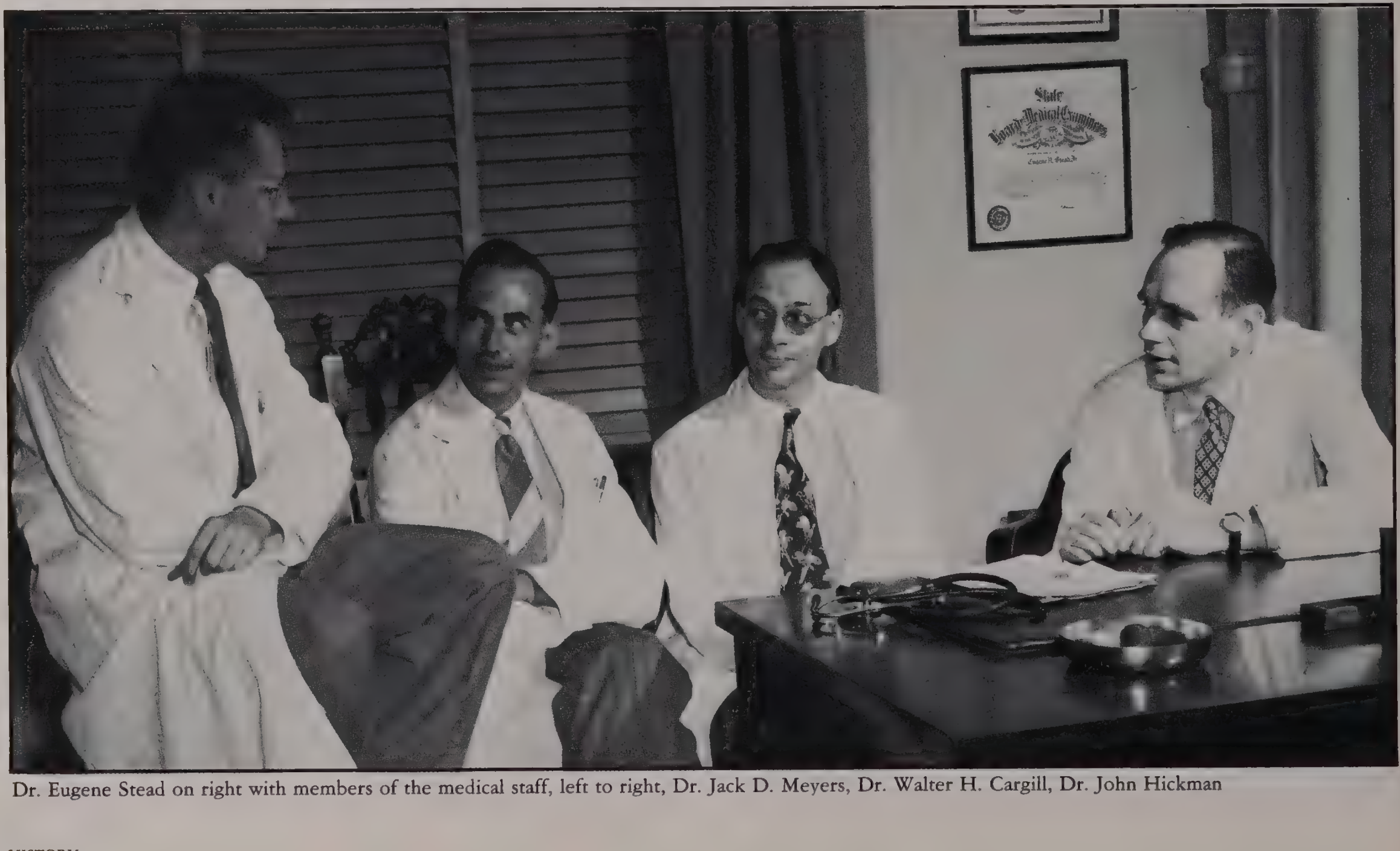
Forty-four percent of the Duke medical faculty and almost all graduates (the oldest being 38) were on active duty. Many house staff were forced to enlist. Bernard Fetter, then a surgical intern, was among them. Following the war he went to Johns Hopkins where he did a residency in pathology. Afterwards he obtained an appointment at Vanderbilt where he stayed until he was invited by Dr. Forbus to join the Pathology Department at Duke. Dr. Fetter has since become a widely respected and distinguished pathologist; Duke is fortunate that he returned.

In addition to the hospital unit and accelerated training program that Duke supplied, some 200 faculty, including most of the senior professors of the medical school, organized themselves informally as the Duke Council for American Defense. This group surveyed the resources of the University that might be useful in national emergencies and generally informed the local community to prepare for whatever turn the war might take.

The postwar years saw many changes in medicine in general, and at Duke specifically. The post-Depression years and the war experience convinced many that big government was not so bad afterall, and government began taking a more active role in determining directions in health care and in medical research and education.

In the era of antibiotics and new effective drugs for hypertension, psychiatric illness, radical new surgical procedures, etc., the nation became convinced that we could solve most of our problems if we just pumped enough money into research. These factors and others led to tremendous increases in federal funding of medical centers and especially basic medical research. For example, at Duke in fiscal year 1947-48, Public Health Service Research Grant and Contract money totaled $151,150 or 20% of total University research money. In 1956-57 the grants were $963,677 or 35% of total research money, and by 1965-66 the numbers had ballooned to $6,873,516 and 52% of the total. This had a number of effects, one of which was increased emphasis on the basic sciences. Directions in research became progressively less determined by internal and local needs and more by national priorities. The basic science emphasis helped to generate a rapid growth in biomedical knowledge.

The effects of the postwar changes on the medical curriculum at Duke are covered later. These years also witnessed remarkable expansion in the medical center. For example, in 1930 when the medical school facilities opened, the faculty numbered 75. In 1945 that number had grown to 199. But by 1964 the number of the medical school faculty was almost 430 and growing rapidly. In this era of growth and basic research emphasis,



Dr. Eugene Stead on right with members of the medical staff, left to right, Dr. Jack D. Meyers, Dr. Walter H. Cargill, Dr. John Hickman

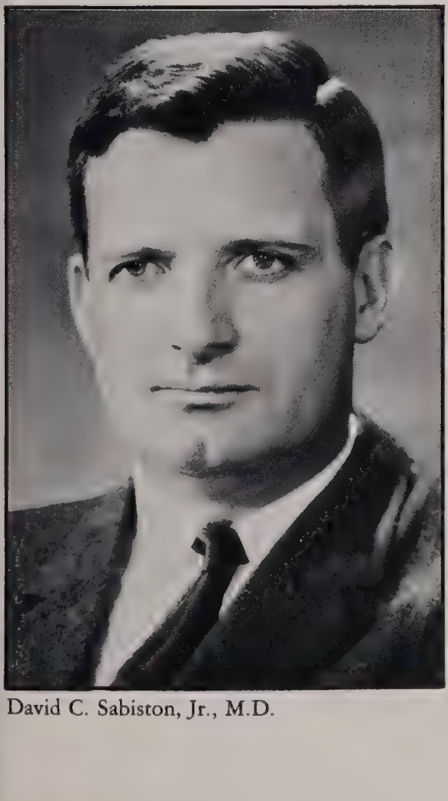
POST WAR EXPANSIONS

1953 The Veterans Administration Hospital
1957 Hospital addition
Out-patient Clinics
1962 Gerontology and D&T building (Blue Zone)
1963 Clinical Research Building I (Blue Zone)
1967 Barnes Woodhall Building
5th floor addition (Red Zone)
1968 Clinical Research Building II
Nanaline H. Duke Building
1969 Marshall I. Pickens Building
1970 Research Park Buildings I, II, III, and IV
1971 Civitan Building
1972 Parking Garage #1
1973 Alex H. Sands, Jr. Building
Duke Eye Center
1975 Seeley G. Mudd Building
Animal Laboratory Isolation Facility
1976 Edwin L. Jones Basic Cancer Research Building
1978 Edwin A. Morris Clinical Cancer Research Building
1979 Parking Garage #2
1980 Duke Hospital North

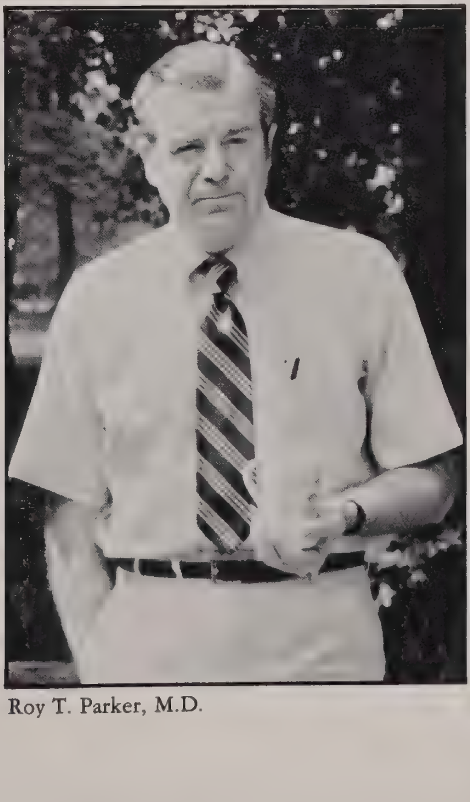
Duke became established as a major tertiary care center and the imbalance between clinical and basic science was erased. While the basic science departments were experiencing phenomenal growth, the clinical departments attained prominence due to the leadership of a number of young men, many of whom arrived after Duke had established itself as a tertiary care center. They promoted research and fostered academic competitiveness. Eugene Stead came to Duke from Emory in 1947 to succeed Dr. Hanes as Chairman of the Department of Medicine. He has since gained a national reputation as a great clinician. Dr. Clarence Gardner led the Department of Surgery for many years and helped it gain national recognition. He also founded the Durham Cerebral Palsy Hospital. Dr. Deryl Hart became involved in the executive branch of the medical center after many years as head of the Department of Surgery. He eventually became president of the University and saw it through some very hard times in the 1960's that frequently verged on catastrophe. Other important clinicians include Jerome Harris in Pediatrics, Edwald Busse in Psychiatry, James B. Wyngaarden in Medicine, David C. Sabiston, Jr. in Surgery, Roy T. Parker in OB/GYN, Thomas Kinney in Pathology, and many others who were integral to the growth and stature of Duke. The contributions of many of these leaders are covered in detail elsewhere in this volume.

James B. Wyngaarden, MD.

Thomas Kinney, M.D.



David C. Sabiston, Jr., M.D.



Roy T. Parker, M.D.

Ewald Busse, M.D.

"For Duke University Medical Center 1965 may ultimately be known as the year the future was charted . . . For it was in the year of the Big Decision — the year the center, along with the University, unveiled a new master plan that would literally change the profile of one of the South's outstanding educational institutions." This quote from the *1966 Aesculapian* does not refer to a plan to bomb UNC, but rather to the announcement by the medical center of a three-year $28.8 million plan to meet future demands for more physicians and nurses, and to provide more and better medical facilities. In that year, Duke not only began its prodigious construction venture, but increased by 60% the number of doctors and nurses trained at Duke. It also increased the number of beds to 1,000, making Duke the largest hospital in the state, began a new organ transplant program, with the first successful kidney transplant in North Carolina, and started the first program in the country to train Physician's Associates. There were numerous other accomplishments; however, in the view of many, the crowning achievement of this era of change was the introduction in 1966 of the new curriculum.

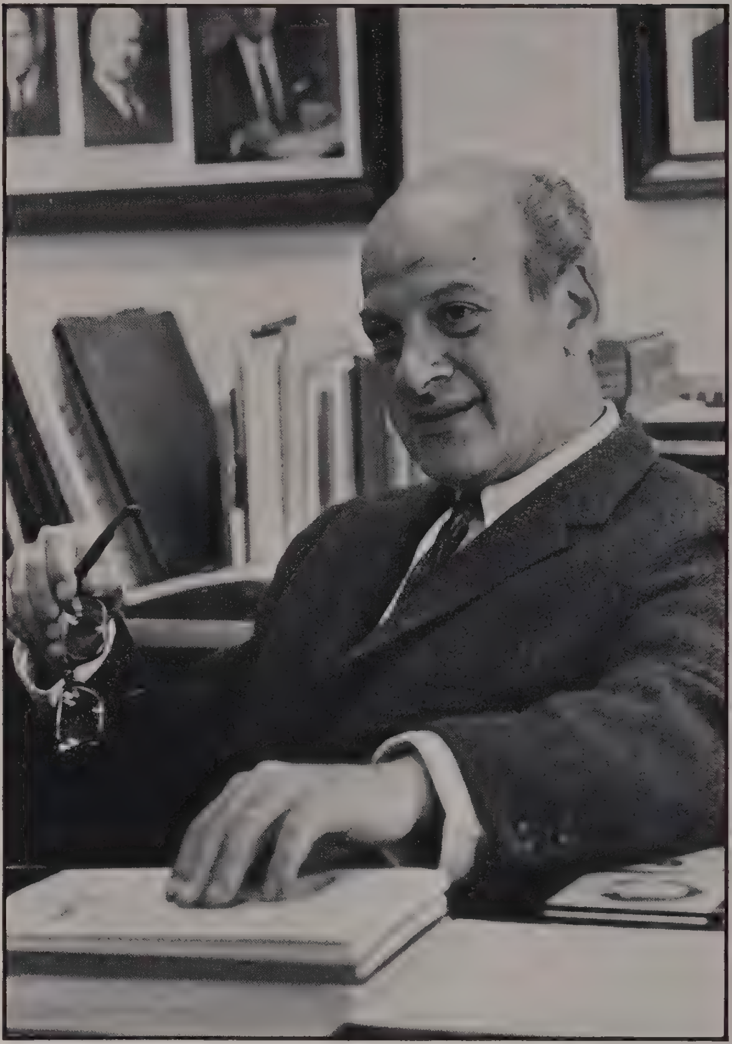
The 1930 medical curriculum at Duke was a model of "flexibility within tradition." The tradition entailed the use of a 4 year "2 + 2" curriculum established at Johns Hopkins and made normative by the Flexner report. Flexibility was evidenced by the allowance of 46% elective time in the program. However, the pressures bearing on the design eventually proved overwhelming.

The original liberalized curriculum was doomed to failure in that the inexperience of students made it almost impossible for them to design their elective time judiciously and led the faculty to reassess the medical curriculum. Also, new medical knowledge was being accumulated at an alarming rate, literally a "knowledge explosion", and each new fact vied for a position in the limited amount of time that material could be presented.

In 1930 it was still possible to present all that was known in biochemistry and microbiology. However, the desire to make a complete presentation lingered long after it became impractical to do so. With the tremendous surges in biomedical research in the 40's and 50's, information began accumulating so fast that the turnover rate for factual information in medicine was estimated to be a mere 5 years. The "teach it all" mentality led to pressure for required time in some fields, which resulted in parallel demands in other fields. Courses enlarged and overlapped and elective time diminished year by year.

The curriculum began breaking down first in the preclinical departments, because it was felt that although the students were grasping the factual material they were not developing maturity of judgement. The block system did not allow them time to reflect on what they were doing. The first change was that Anatomy and Pathology were given more time. As the emphasis shifted towards more comprehensive coverage of the medical knowledge, the faculty members began essentially to compete with each other for time to present their subjects more "adequately" (translate "thoroughly"). Some well attended elective courses became required, and the content of the curriculum came to reflect more the experience of the faculty and less the specific interests of the students.

During the last years of the decade 1930-1940 the dismantling of the original curriculum was completed by the clinical departments. Originally, emphasis was placed on Medicine and Surgery, but as Pediatrics and OB/GYN grew and as the subspecialties of Medicine and Surgery grew, these expanding fields demanded more and more time.


Dr. Philip Handler

The pressure was eased somewhat in the middle 50's, with an increase in the number of clock hours in the curriculum. This re-evaluation period also led to a proposal by Dr. Philip Handler for a training program for clinical investigators, eventually resulting in the Research Training Program. Initiated in the fall of 1959 under the direction of James B. Wyngaarden, then Associate Professor of Medicine and Biochemistry, the Research Training Program was a nine month course designed to train a select group of students to do research, with a twenty-week original project.

In August 1961, the management consultant firm of Booz, Allen, and Hamilton, in a report on future planning, recommended the development of strong basic science departments for a school with the national reputation that Duke had.

The years 1959 to 1961 also saw the retirement of W.C. Davison and several of the original department chairmen. This made future change much more likely. The new Dean, Barnes Woodhall, was strongly in favor of implementing the ideas recommended by Booz, Allen, and Hamilton. Also, Dr. Hart retired as Professor of Surgery to become President of Duke University, bringing the University and the Medical School closer together. In this atmosphere planning for a new curriculum was begun.

Any new curriculum would obviously have to address itself to the problem of the rapid turnover of medical facts. To this end it was decided that each department would have to weed out what it considered all but absolutely necessary factual material, leaving what was called the "core content" of the discipline. This weeding process was not to be merely a "condensation and concentration", but rather a "thorough examination of the principles and methodology of each discipline."

Dr. Barnes Woodhall

It was also felt that the traditional curricula tended to equate teaching with learning, presented only what the faculty wanted to teach, and left little elective time for students to pursue studies of their own choosing. Thus the new curriculum was to maximize elective time and provide for the possibility of a variety of learning experiences built around a central core. This would also allow a student to pursue one area of knowledge in depth, through research or independent study. Other advantages gained by a curriculum that ensured elective time would be early differentiation into particular special interests while retaining the option for a general education, dovetailing of undergraduate and post graduate training and avoidance of areas of duplication. The emphasis would definitely be on the production of specialists. It was felt that "given the increasing importance of scientific research in modern medical practice, the specialization of the Duke faculty and the fact that virtually no Duke graduates were entering general practice, the elective curriculum was not specifically directed to the production of general practitioners."[6]

Another factor determining the final design of the new curriculum was the belief that students needed to see patients earlier than was usually possible under the standard "2 + 2" curriculum. The planners thought that the students should begin to see patients after one year of study of the "core knowledge" of medicine. Afterall, patient contact is what most students enter medicine for. But another key to this design was that after a year with patients, students could go back to the study of basic medical sciences with a direction and increased appreciation not likely under the traditional program. After this 3rd year of elective basic science pursuits, the students would spend their fourth year in clinical courses of their choosing in preparation for their planned career.

The idea of offering the new curriculum to some students, while training another group simultaneously under the traditional system was considered for a time but eventually dismissed as impractical. It was felt that if Duke was going to go with the new idea, it should go all the way.

The planners originally hoped to offer the new curriculum in 1964, but inevitable problems arose which delayed its implementation. A major difficulty was deciding what was to constitute the core curriculum. Obviously, if time was to be available for elective study to the tune of 50% of the curriculum in a program that at the time offered essentially none, some major sacrifices in required time would have to be made. The process was painful, particularly for the basic science departments which commanded a large share of the old system. The Department of Anatomy was especially affected by the change. Under the old curriculum they controlled 531 hours of student time. The new curriculum left them with only 252. However, the basic scientists were assuaged somewhat with the promise that the more interested and motivated students would return in the 3rd year for individual in-depth study.

Financial problems also contributed to the delay in implementation. But with the major problems resolved, a grant by the Commonwealth Fund in 1965 to finance the additional faculty needed, combined with funds from the University and contributions by the clinical faculty through the Private Diagnostic Clinics, led to the announcement of the new curriculum for the fall of 1966.

THE OLD CURRICULUM	THE NEW CURRICULUM
FIRST YEAR Anatomy Biochemistry Physiology Psychiatry	*FIRST YEAR* FIRST TERM Anatomy Biochemistry Physiology Genetics Psychobiology SECOND TERM Pathology Microbiology Pharmacology Psychobiology Physical Diagnosis Clinical Microscopy Preventative Medicine
SECOND YEAR Microbiology Pathology Clinical Microscopy Clinical Diagnosis Preventive Medicine Surgery Pharmacology	*SECOND YEAR* Medicine Obstetrics Pediatrics Psychiatry Surgery
THIRD YEAR Psychiatry Surgery Medicine Obstetrics & Gynecology	*THIRD YEAR* Electives
FOURTH YEAR Surgery Medicine Pediatrics Elective	*FOURTH YEAR* Electives

At the end of the 1966 school year, Duke was looking anxiously to a new era in medical education — the new curriculum. It was also anticipating the completion of the new entrance building which would house OB/GYN and Radiology, and to the completion of Medical Science Building I. Everyone also looked wistfully toward the construction of a second medical science building, a sorely needed new library with a computer and bibliography system, a new private patient wing, and lastly a new locker, lounge, and cafeteria facilities for medical students.

Well, those things and much more have become realities for Duke University. But the most exciting thing remains: the constant desire to progress and to improve, that characteristic which has been the driving force of the University from its inception. It has been this desire or rather the successful conversion of this desire into a dynamic reality that has made Duke one of the most important medical centers in America and the world.

Frank J. Spence

Aerial view of Duke Medical School, ca 1940

Davison, W.C., *The Duke Medical Center (1892-1960)*, 1966.

Duke University Medical School Yearbooks, including *Stethoscope*, 1950, *Aesculapian*, 1960, 1965, 1966, 1978.

Duke University Financial Report 1947/48 through 1965/66.

Duke University School of Medicine Bulletin 1930/31 through 1964//65.

Gifford, James F. Jr., *Evolution of a Medical Center*, Duke University Press, 1972.

Gifford, James F. Jr., ed., *Undergraduate Medical Education and the Elective System*, Duke University Press, 1978.

Anylan, W.G. and Sabiston, D.C. Jr., "A New Approach to Medical Education," *Surgery*, Vol. 62, July 1967, p. 134-140.

Davison, Wilburt C., "An M.D. Degree Five Years After High School," *JAMA*, June 2, 1928.

Davison, Wilburt C., "Liberalizing the Curriculum," *Southern Medical Journal*, Vol. 21, December 1928, P. 983.

Note on Sources:

About 50% of this essay is made up of direct plagiarism of the above sources. Another 25% or so is paraphrasing; i.e., I left out the hard words and rearranged the rest. The rest is total fabrication and not to be taken seriously.

THE YEARS 1965-1980

The fifteen years between 1965 and 1980 were the era of the elective curriculum. During this time it was planned, geared up, adjusted, and evaluated. The elective curriculum is by no means perfect but to judge and understand it, a historical perspective is necessary.

THE IDEA

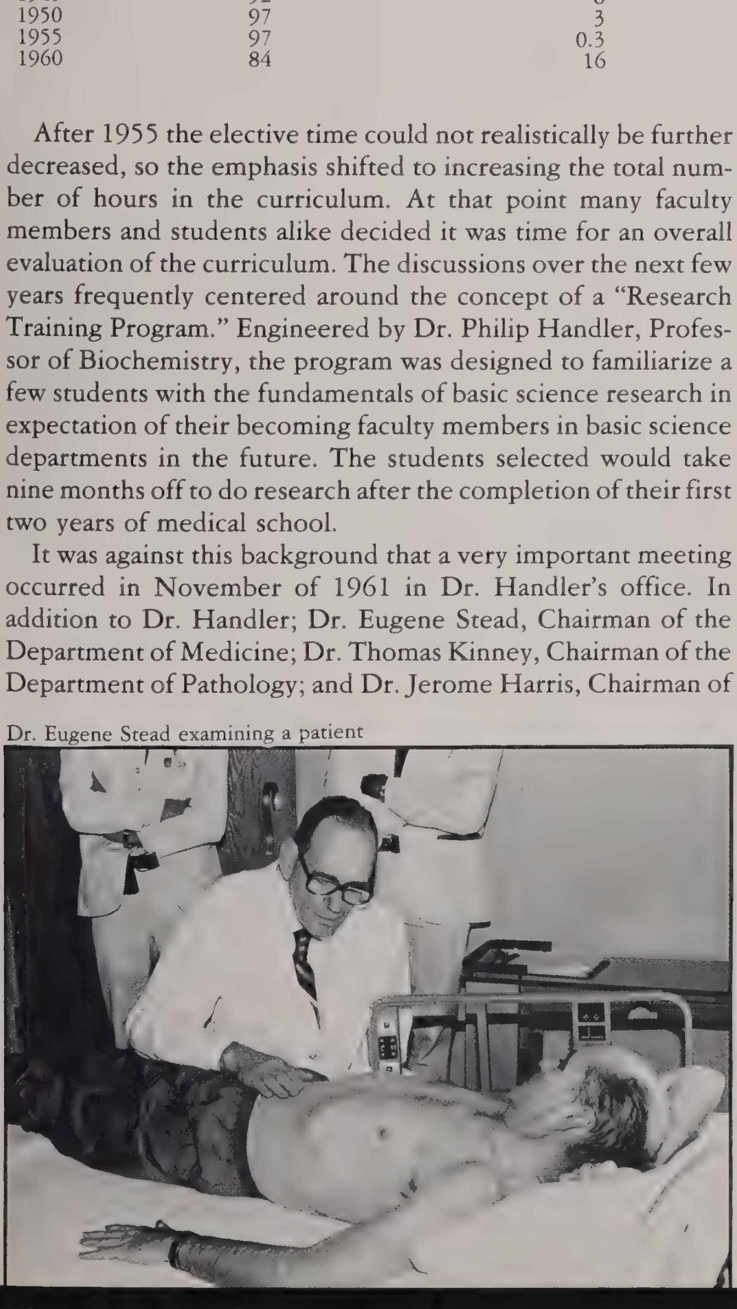
Duke Medical School opened its doors in 1930. Since many of the first faculty members had been recruited from John Hopkins Medical School, the design of our curriculum was understandably very similar to the one at Hopkins. In its early years the Duke curriculum allowed nearly half (46%) of the student's studies to be in elective courses. Unfortunately, as medical knowledge burgeoned over the next three decades, the faculty instituted more required time at the cost of decreasing the elective time. The zenith of this trend was reached in 1955 when, of the 5,148 teaching hours over the four years, only 17 were elective time! The chart below depicts this progression of declining elective time:

YEAR	PERCENTAGE OF HOURS IN REQUIRED COURSES	PERCENTAGE OF HOURS IN ELECTIVE COURSES
1930	54	46
1935	72	28
1940	83	17
1945	92	8
1950	97	3
1955	97	0.3
1960	84	16

After 1955 the elective time could not realistically be further decreased, so the emphasis shifted to increasing the total number of hours in the curriculum. At that point many faculty members and students alike decided it was time for an overall evaluation of the curriculum. The discussions over the next few years frequently centered around the concept of a "Research Training Program." Engineered by Dr. Philip Handler, Professor of Biochemistry, the program was designed to familiarize a few students with the fundamentals of basic science research in expectation of their becoming faculty members in basic science departments in the future. The students selected would take nine months off to do research after the completion of their first two years of medical school.

It was against this background that a very important meeting occurred in November of 1961 in Dr. Handler's office. In addition to Dr. Handler; Dr. Eugene Stead, Chairman of the Department of Medicine; Dr. Thomas Kinney, Chairman of the Department of Pathology; and Dr. Jerome Harris, Chairman of the Department of Pediatrics were present. Ironically — or perhaps typically — none of the participants can recall the original purpose of the meeting. After the formal business was concluded, they turned their attention to their favorite albatross, the curriculum.

Dr. Eugene Stead examining a patient



Thomas Kinney, M.D.

Certain criticisms won unanimous agreement:

1) The curriculum was much too inflexible. Even though medicine offered such a diversity of specialties, a student could not vary his/her curricular content to coincide with his/her interests. Similarly, a student was precluded from exploring one particular field of interest in depth.

2) Instead of promoting creativity or original research, the curriculum inhibited it. The student learned basic sciences during the first two years when he/she could not appreciate their clinical pertinence. Rather than a sense of appreciation and interest, a feeling of frustration and a sense of distaste for these subjects developed. Only after the clinical skills have been mastered does a physician realize the importance of a sound background in the basic sciences, but then the rigors of practice make it too late for the average physician to pursue these areas of importance.

3) Students were not exposed to clinical areas until quite late in the curriculum, thereby discouraging early career decisions. By delaying such decisions, a student could not construct a curricular program in accord with his/her career plans.

As discussions about a new curriculum continued, some tenets evolved. To appreciate and understand clinical training, a fundamental vocabulary was necessary before a student started his/her clinical studies.

Secondly, the curriculum revisions must be for all students. The concept of revising the curriculum for some students and retaining the traditional one for others was not acceptable. However, in this new curriculum multiple paths should be open to students to pursue their own career interests.

Thirdly, even though the new approach would radically decrease the basic sciences taught before clinical exposure, admission to Duke Medical School should not be shifted to include only students with very strong science backgrounds.

With this conceptual basis a unique curriculum slowly took shape. The first year would provide a student with the core material needed to understand the clinical experiences he / she would encounter on the wards during the second year. The third and fourth years would be entirely elective, with approximately one half of the student's time being involved in basic science studies and one half in clinical rotations. Students thus would be encouraged to design their own elective experiences.

These aims were articulately stated in a grant proposal to the Commonwealth Foundation for financial assistance in instituting this curricular format:

> "(1) to provide a strong academic basis for a lifetime of growth within the profession of medicine, with the development of technical competency, proficiency, and the proper attitudes peculiar to the practice of medicine as well as appreciation of the broader social and service responsibilities; (2) to establish for the first year a basic science program which will fulfill the purposes of the increasingly heterogeneous student body; (3) to offer both clinical and basic science education simultaneously; (4) to permit the student to explore his personal intellectual preferences and capabilities; (5) to allow study in depth in selected areas, either basic science or clinical; (6) to provide greater freedom of course selection, and thus to encourage earlier career decision; (7) to achieve better integration of the medical school curriculum with residency training and the practice of medicine."

The Commonwealth Foundation did unanimously approve the Duke request, and thus the class entering in the fall of 1966 became the first class of the "New Curriculum."

THE FORMAT

The new curriculum proved to be much more than just a different compartmentalization of the medical school years. In essence, the basic science departments were asked **not** to cram everything into one year that they had previously taught in two years, but rather to define a core of knowledge that a student should possess before entering the clinical year. It was **not** an attempt to provide a student with all the facts he⁄she needed to be a competent physician — that should occur throughout the last three years. Rather, its purpose was to provide a student with the tools he⁄she would need in approaching clinical problems.

Under the old curriculum Biochemistry and Genetics, Physiology, and Anatomy were taught in the first year, with Pharmacology, Pathology, Microbiology, Human Behavior, Physical Diagnosis, Laboratory Microscopy, and Community Health Sciences taught in the second year. Clinical courses were then taken in the third and fourth years.

The current curriculum is outlined below:

YEAR 1		YEAR 2	YEAR 3	YEAR 4
Term 1	Term 2			
Anatomy Biochemistry Physiology Neurological Sciences Genetics	Pathology Microbiology Phamacology Human Behavior Introduction to Clinical Medicine	Medicine Surgery Obstetrics Pediatrics Psychiatry	Basic Science Electives	Clinical Science Electives

Each basic science department teaches a core course in the first year and then offers electives in the third year. The first year's schedule runs:

Mid-August through Thanksgiving	
Biochemistry	105 hours
Physiology	119 hours
Gross Anatomy	106 hours
Microanatomy	101 hours
Genetics	29 hours

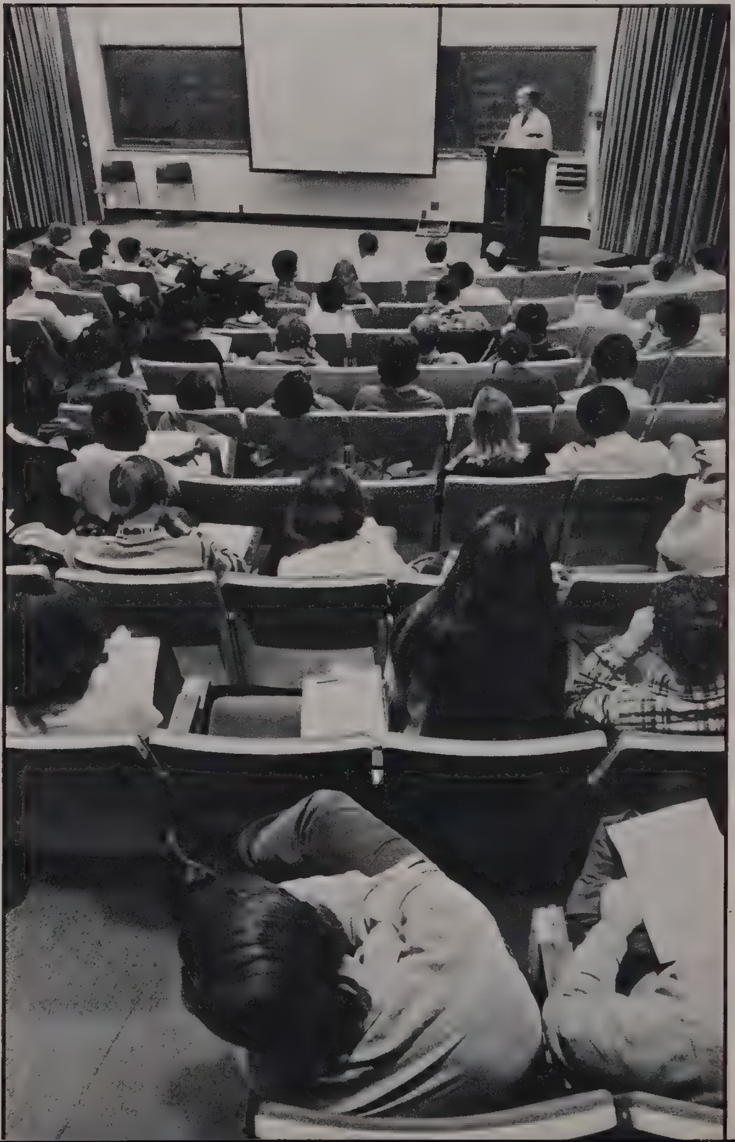
Thanksgiving through Christmas	
Neuroanatomy	57 hours
Neurophysiology	31 hours

January through Mid-May	
Pathology	214 hours
Microbiology and Immunology	160 hours
Pharmacology	121 hours
Human Behavior	61 hours

Mid-May through July First	
Introduction to Clinical Medicine	170 hours
Community and Family Medicine	59 hours

The second year is comprised of five eight-week rotations in Medicine, Surgery, Psychiatry, Pediatrics, and Obstetrics and Gynecology. These cover a total of forty weeks. Third and fourth years are all elective with half of each student's time being spent in basic science and half in clinical science. This totals about thirty-two weeks each year. Passage of Parts I and II of the National Board Examination is now required for graduation.

Students in medical center amphitheatre



THE FIRST YEAR

For the new curriculum to be successful, the general approach to each year had to be reassessed. Furthermore, each department had to review its own approach to the different years. This required an enormous amount of time, energy, and willingness to compromise. Departmental autonomy has a strong tradition at Duke and for the new curriculum to function effectively, it required support and commitment from all the departments. This was most obviously seen in the revision of the first year. The goal was simple: to trim down two years of basic science material to a core of information to be crammed into eight months of the first year. The real difficulty arose in trying to decide what to include and where. Each department had to justify the number of hours it was allocated. To appreciate the dimensions of this burden, a comparision of the number of hours assigned to the departments in the respective curricula is helpful:

DEPARTMENT	OLD CURRICULUM	NEW CURRICULUM
Anatomy (Gross, Micro, and Neuro)	531	252
Biochemistry	208	117
Physiology	358	150
Microbiology and Immunology	164	160
Pharmacology	110	121
Pathology	348	214
Introduction to Clinical Medicine	364	96

This burden of trimming hours and lectures fell most onerously on the Anatomy Department. Under the old curriculum 531 hours were allocated to anatomy whereas under the new it was reduced to less than half that number, 252 hours. This required a complete restructuring of the approach to anatomy. Minor changes such as reducing the number of lectures on cell biology and increasing the structure of the course were instituted.

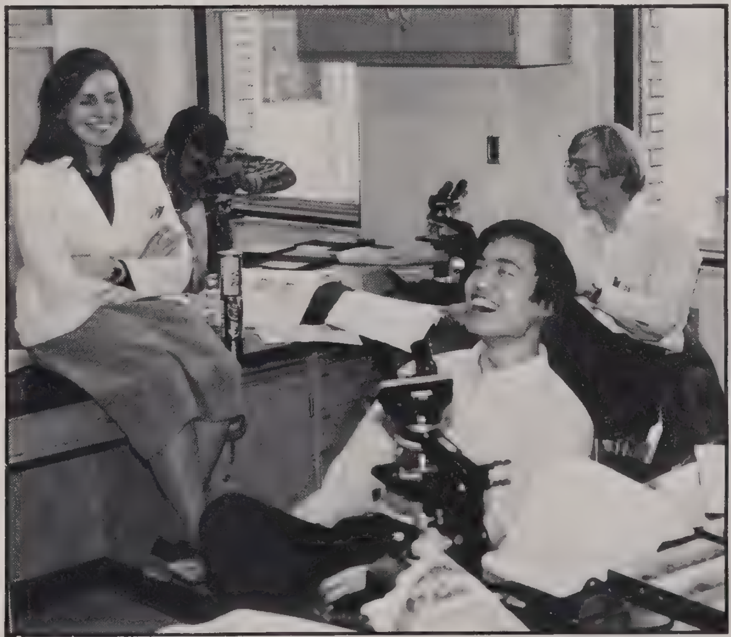
The greatest issue, however, was how to teach Gross Anatomy most effectively. During the first years of the new curriculum, dissections were attempted on fetuses rather than on adult cadavers. That failed completely. Students complained that they could not see what they were supposed to see and that adult anatomy was different from fetal anatomy. The faculty complained that the physical space was too limited. Next, complete abandonment of individual dissection was tried. That, too, met with disfavor, for first year students want the experience of dissection. It was seen as an ingrained tradition in medicine and one worth retaining. Finally, the Anatomy Department came to the existing solution — six students on a cadaver, four dissecting at one time while the other two are attending different lectures or films. Because of the limited time for Gross Anatomy (100 hours), it is an intense experience, but the compromise seems to be working well. Students feel at ease with their knowledge of anatomy, and there has been no uproar from the clinical departments *vos-a-vis* students' inadequacies in anatomy. The Anatomy Department is to be commended for its continued attempts to meet the students' needs and desires.

Anatomy, however, was not the only department that had to undergo major changes in approach. Previously some of the departments had viewed their courses as serving two purposes — to familiarize students with a foundation of information and to allow students to explore some area in depth. This latter purpose included literature searches and critical analysis of articles, thus by necessity involving an in-depth exposure to a limited area. The Physiology Department in the old curriculum devoted ten weeks to providing the basic fund of knowledge and then six weeks to this intensive topical study.

Gross anatomy lab, John Kreit

The department quickly realized that the continuation of this approach in the first year would be inconsistent with the theory of the new curriculum. Instead the department separated these diverse goals into distinct goals for the different years. They would provide the core during the first year and then encourage students to gain the in-depth experience during the third year. That has worked exceedingly well and is in consonance with the purposes of the new curriculum.

In the pre-1967 curriculum Biochemistry was taught over a twenty week period with three hours of lecture, two hours of small group discussion and six hours of laboratory experience per week. By the fourth year of the new curriculum, the laboratory portion was dropped from the core course. The scope of the students' concept of biochemistry would be limited without the laboratory experience, but the new approach must emphasize useful information. The return in utilizable information per hour of laboratory time is far less than from lectures or small group discussions; it is simply not a luxury that one can enjoy in an accelerated curriculum. The chart on the next page should provide an idea of the magnitude of the change:


First year microanatomy lab

CONTACT HOURS IN BIOCHEMISTRY

	Traditional Curriculum	1975
Lectures	58 (27%)	56 (48%)
Laboratory	120 (55%)	0 (0%)
Group Conference	40 (18%)	29 (25%)
Clinical Conference	0 (0%)	32 (27%)
	208 (100%)	117 (100%)

The Microbiology Department came to a similar conclusion about lab time. Their reasoning was that individual practitioners would no longer be performing the tests themselves, but would be sending them off to central laboratories. Thus, lab time was cut over 50 per cent and labs were used not for their practical value to the individual doctor but as demonstrations of the lecture subjects and for stimulation of the students' imaginations.

The new curriculum was instituted during the late '60s at a time when students were questioning everything. No longer could a professor merely state "Learn this"; students wanted to know why and what was its clinical pertinence. In response to this attitude many of the first year courses attempted to demonstrate the bridge to clinical practice through clinical correlation conferences. (The extent of this is obvious in the preceding table). Biochemistry and Genetics now frequently present patients with specific metabolic deficiencies to demonstrate the disease entities. Microbiology also developed numerous clinical presentations.

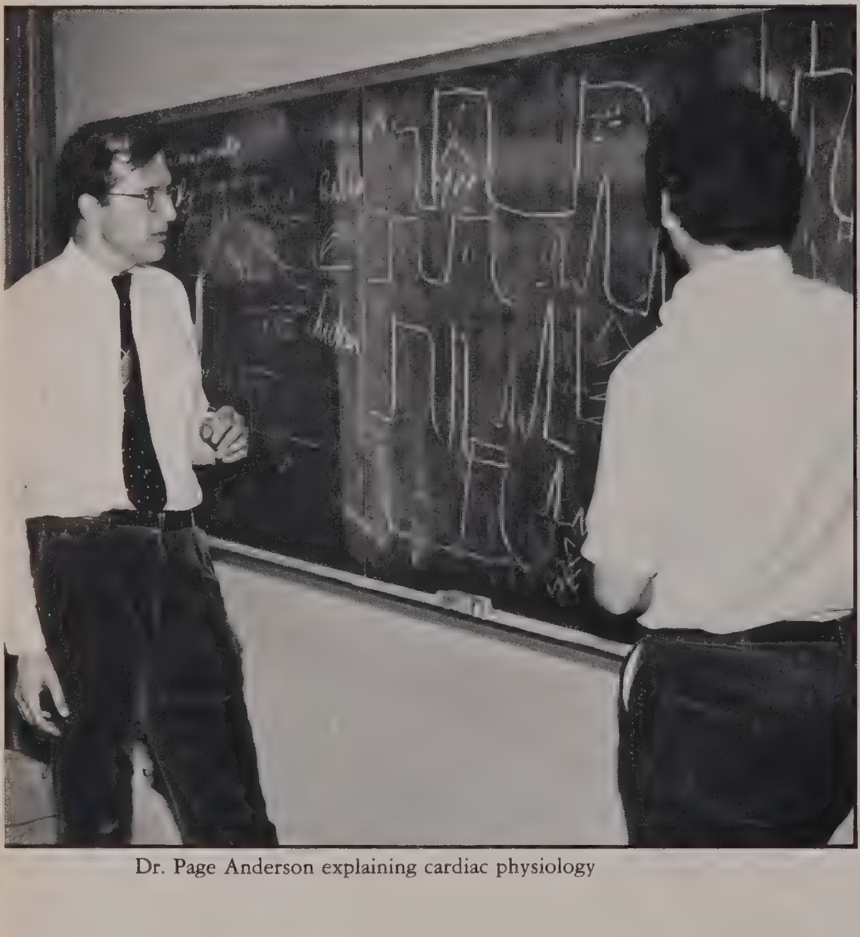
With the advent of the new curriculum, small group discussions became popular. Each class was divided up into seven lab sessions of about sixteen students each. Biochemistry, Physiology and Pharmacology utilized these groupings for weekly small group conferences. Professors would participate to clarify or emphasize different areas. This was an attempt to personalize the education by encouraging students to ask questions and to develop a true understanding of the subject.

Further changes have occurred since the institution of the new curriculum. Neuroanatomy and neurophysiology are taught in a mini-term before Christmas. Currently, Gross Anatomy, Genetics, Biochemistry, Physiology, and Microanatomy are begun at the opening of school in mid-August and end with finals before Thanksgiving. Upon returning from the Thanksgiving break, an intense three-week course in Neuroanatomy and Neurophysiology is presented with finals before Christmas. Students then return the first week in January to start a new semester of Pathology, Pharmacology, Human Behavior, Microbiology, and Immunology.

Thus, the new curriculum brought with it remarkable changes in the first year. By encouraging each department to answer the question, "What is the core of knowledge for your discipline that a student needs to appreciate clinical problems?," and its corollary, "How best can we present this body of information *vis-a-vis* our discipline?," a complete reassessment of the medical curriculum was undertaken. The results for the first year?

1) Deleting, then reinstating dissection of cadavers;
2) Redefining the purpose of laboratory time;
3) Emphasizing small group question and answer sessions;
4) Instituting clinical correlations.

The end of the spring semester, however, does not mark the end of the first year. Under the new curriculum a student would enter clinical rotations in the second year. One of the most difficult questions posed was how to prepare students for that experience. Traditionally, Physical Diagnosis and Clinical Microscopy courses were given during the second year. Physical Diagnosis taught history-taking and the physical examination and included daily lectures and twice-weekly on-ward physical diagnosis in groups of four to eight students. This totalled 208 hours. Clinical Microscopy featured lectures and labs on mastering simple laboratory techniques; 156 hours were allotted to this.



Dr. Page Anderson explaining cardiac physiology

First year medical students in lab

In the new curriculum this method was not feasible. Consequently, a special six-week course called Introduction to Clinical Medicine was designed to run from mid-May to the first of July. The time for the courses was reduced to 96 hours total. Radical changes in teaching techniques had to be incorporated. Radiologic examination has now been included in the course, and thus all three modalities of data collection — physical diagnosis and history-taking, laboratory examination, and radiologic examination — are now coordinated and taught together. This approach has met with excellent success.

Nonetheless, there are obvious limitations to this approach. A student cannot learn as well in an intense 96 hour time period as he/she could in a leisurely 364 hour schedule. The students arrive on the wards with less practical knowledge and less confidence than in the pre-1966 curriculum. This caused great consternation originally, especially among residents who had considerably higher expectations. However, by the third clinical rotation everyone agreed there was no appreciable difference between the students from the pre- and post-1966 curricula. Over the years residents and senior staff have revised their expectations, and now there are only a few individual problems in making the adjustment to the clinical wards.

Also during the mini-term a Community Health Sciences course is presented. This course incorporates the fundamentals of biostatistics, epidemiology, and community health. Frequently, this is a student's only formal exposure to nutrition, occupational health, biostatistics, or preventive medicine. Unfortunately, the course is taught during a period when a student is first getting a taste of clinical medicine, and she/he demands material that is immediately clinically applicable. Students often lose sight of the importance of the community health issues, since they are presented concurrently with the Introduction to Clinical Medicine course.

Thus, ends the first year — an emotionally charged and usually exhausting year for students. I remember my own disbelief and relief when I had finished my last exam and actually was ready for the wards.

Much has been learned in the first fourteen years of our new curriculum about the approach to the first year and our attempts at accelerating the student's clinical experience. Most important has been a realization that continuous reassessment and revisions must be made. Inevitably when one problem is solved, another surfaces with seemingly equally disastrous ramifications.

THE SECOND YEAR

Whereas the first year required great transition and reassessment for the basic science departments, the second year made no such arduous demands on the clinical departments. In the pre-1966 curriculum, students took clinical rotations beginning in the third year; in the post-1966 curriculum, they take the five required ones in the second year. One general approach to the year is fairly unanimous: to cover completely the entire gamut of clinical knowledge is unattainable and unreasonable to attempt. Instead, students are presented with representative learning situations based on the case study method. The objective is to instill in the student a method of approach to the patient and to provide the student with the tools and methodology for solving new medical problems encountered during her / his career.

As already mentioned, departmental autonomy and equality are the cornerstones of the new curriculum. This is exemplified in two obvious ways in the second year. First, one of the tenets of the new curriculum was that each of the five clinical departments would have an eight week rotation in the second year. Other schools have rotations of differing lengths depending on the subject, but equal rotations were agreed upon early in the curricular discussions.

David Albert with "Harvey"

Second, each department could arrange its rotation consistent with its own approach to medicine. This took different forms depending on the department. For instance, the Medicine rotation makes absolutely no attempt to "cover" the field of Medicine. Each student works up her/his own patients and is encouraged to learn about those specific disease entities; the emphasis is on attaining clinical approaches and becoming competent in clinical skills. The Chief Residents frequently present lectures on different topics in medicine, but any hiatus in a student's clinical knowledge can be filled in during the third and fourth years of elective courses or during the residency training.

In contradistinction, the Surgery Department aims at providing the student with at least some exposure to the major areas in surgery. Students typically work up and follow patients, but this experience is supplemented by numerous teaching conferences designed to acquaint the student with diseases which she / he may not have personally encountered. Again the acquisition of skill in performing clinical procedures, such as insertion of nasogastric tubes, thoracentesis, and the administration of intravenous fluids, is emphasized. Two additional features are unique to the surgery rotation: first, because of the demands of the operating room, it has been difficult to have a resident continually available for student instruction. For this reason, the position of Teaching Resident was created. This position rotates every two months among the residents, and the resident's only responsibility is to teach the second year medical students. He/she reviews the histories and physicals with the individual students and conducts teaching seminars for the students. This degree of resident accessibility has met with great success from the students.

Dr. Anlyan rounding with medical students Ann Lansing and Chip Davis

Secondly, subspecialty conferences are held each afternoon for an hour. Each subspecialty area — neurosurgery, orthopaedics, otolaryngology, ophthalmology, plastic surgery, and urology — is given five lectures during one week to highlight the important aspects of their specialty. Brief and incomplete as this approach may be, it does provide a student with the basic concepts of each subspecialty.

Unlike Medicine and Surgery where a student spends the entire eight weeks with one resident on a specified ward, the Obstetrics and Gynecology rotation provides a variety of experiences for each medical student. The Department of Obstetrics and Gynecology utilized the institution of the new curriculum as a vehicle for outlining its goals for the future which included:

1) an emphasis on reproductive biology as the basic scientific orientation;
2) the development of outpatient and community experiences for the medical student;
3) the establishment of a Woman's Clinic in which the distinction between private and public patients would be eliminated and in which patients would be treated by a health team.

In pursuance of these goals, students have morning lectures by the Chief Resident on different aspects of Ob / Gyn. The students then rotate through the obstetrical wards, the gynecologic wards, and the Woman's Clinic. In addition, students have periodic "outrider" experiences where individual students go with residents to any of six satellite clinics throughout the state to provide community Ob / Gyn care. This diversity of experiences is quite beneficial in understanding the varied aspects of Ob / Gyn and in observing different practice modalities and role models.

Similarly, the Pediatric rotation provides a variety of experiences for each student. He / she spends time in the Intensive Care Nursery, inpatient wards, full-term nursery, and outpatient clinic. Again the team approach and the use of community physicians as role models are emphasized.

The Psychiatry rotation offers the student a choice in experiences — inpatient, outpatient, and the V.A. In addition to lectures presented by the Psychiatry staff, students are encouraged to get involved in group sessions where group dynamics are emphasized. Throughout the rotation the emphasis is upon the recognition and appreciation of serious psychiatric disorders and the different therapeutic approaches available for their treatment.

Thus ends the second year and this concludes the required portion of the medical curriculum. As mentioned, by the end of the second or third rotation, the student is usually reasonably competent and comfortable with clinical medicine. He / she will have been exposed to sufficient material to pass (or take a mandatory fling at) Parts I and II of the National Boards. At this point the beauty of the elective curriculum emerges.

THE THIRD YEAR

As expressed by many participants, most notably Dr. Thomas Kinney, past Dean of the medical school, "The elective courses in the third and fourth years are the *raison d'etre* for the new curriculum." In interviews with recent graduates this theme was repeatedly emphasized: "the third year allows individuals with initiative to delve into areas of interest"; "the major strength of Duke is the **freedom** in the curriculum"; "the major strength of the Duke curriculum is its flexibility and involvement of the student in curriculum planning for the last two years."

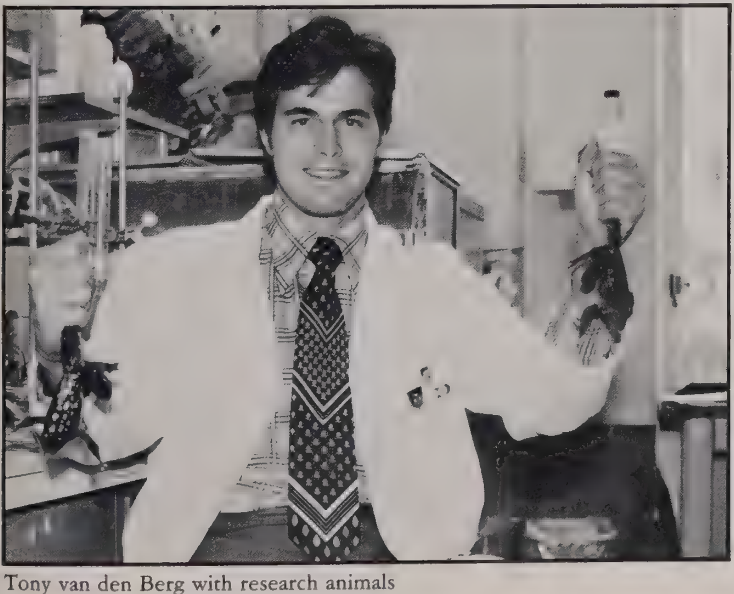
There is, however, another side. Flexibility is an asset for the highly motivated student who knows what he/she wants; for the undecided student it can be an anathema. As expressed by other alumni, "the potential (of the third year) is great, but I myself found it hard to realize that potential;" "I've seen students not able to enjoy the full benefits of the curriculum because they were unsure of their major field of interest until very late in medical school. In essence, it's a great program for someone who has a fairly good idea of their *(sic)* major field of interest." In summary, it is possible for a student to float through this year without focus or direction.

There are several different options for the third year:

1) A Study Tract program;
2) Independent research under a preceptor;
3) A plethora of courses; or
4) A combined degree program.

The original purpose of the third year was to allow a student to concentrate in depth in a specific area. Based on the Research Training Program format, the Study Tracts were developed. A student would sign up for a given tract for four to eight months. In this specific field he / she would attend lectures and seminars and become involved in a research project under a faculty member in the field. The popularity of the Study Tracts varies from year to year, typically enrolling between 25 and 45% of the class. For instance, last year 50 of the 114 students participated in them. The most popular tracts were Cardiovascular-Respiratory (12 students), Endocrinology and Reproductive Biology (10 students), Behavioral Sciences (9 students), Immunology (9 students), and Neurosciences (7 students).

If there is not a Study Tract in accord with a student's needs or if he / she wants to do research under a specific faculty member not associated with a Study Tract, then the student may take special preceptorship courses which most departments offer. In these courses a student works full-time under a specific preceptor. For example, the most popular third year course for the Anatomy Department has been the Preceptorship in Gross Anatomy, as has been the Preceptorship in Behavior Sciences for the Psychiatry Department. Research in Biochemistry and Research in Pharmacology are frequently subscribed courses in their respective departments. Over a third of the medical students take the Preceptorship in Microbiology and Immunology, Special Topics in Pathology, and the Tutorial in Community Health Sciences.



Tony van den Berg with research animals

The third year can also be a time of taking a variety of courses. The courses run for short periods of time, and this can often lead to a patchwork approach. The usual reason behind this approach is to try to "fill in the gaps" left by the first two years. This approach typically leaves the students somewhat frustrated and dissatisfied; this is what is often described as "floating through" the third year without good direction. Cumulative wisdom dictates that the best result in the third year is achieved when an in-depth concentration in one area is interspersed with pertinent courses.

The clinically related courses have understandably been the most popular. After being on the wards during the second year, most students want to see the clinical application of the basic science which they are studying. More students take courses in the Pathology Department than any other basic science department; the average student takes at least two path courses during the third year. The most frequently subscribed to are Cardiovascular Path and Advanced Neuropath, both of which are readily applicable to the Cardiovascular and Neurosciences Study Tracts respectively. In the Pharmacology Department, the most frequently subscribed course is Pharmacological Basis of Medicine with over 60% of each class taking it; again a strong clinical approach is stressed. Over a third of the students take Principles of Infectious Disease (Microbiology); Gastrointestinal Physiology (Physiology); and Renal Physiology (Physiology). Even in Biochemistry the most frequently taken course is Nutrition!

Thus, students who opt for the shotgun approach tend to take courses that are clinically oriented. This gap-filling technique falls short of the purpose of the third year and leaves many students feeling directionless. The burden of improving this situation should fall on the advising system.

Finally, the third year is the time when many students start in combined degree programs. These include the M.D.-J.D.-M.D.-Ph.D., M.D.-M.P.H., M.D.-Medical Historian, and others. These are described in the following section on Combined Degree programs.

In summary, the third year is the year that can make or break the experience at Duke for many students. It can be challenging and exciting, or frustrating and directionless especially if one sees her / his fellow students charged up about their experiences. To get the most out of the third year, one needs to delve deeply into an area, and the primary way of proselytizing this approach is via the advising system.

THE FOURTH YEAR

As there are different approaches to the third year, so are there to the fourth year. A fourth year student has already completed the five required clinical rotations and has had an elective basic science year. With this background he / she has eight more months of clinical electives. Most courses in the fourth year run for one or two months; in this period of time a student can gain a fair overview of that subject matter.

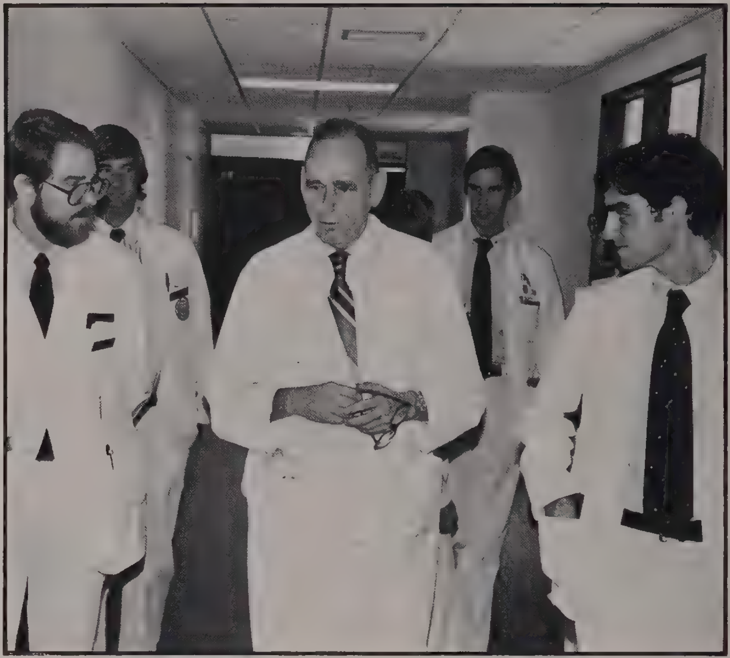
There are two different theories about the fourth year. One is to specialize early; that is, take as many courses directly relevant to your chosen field as possible. The other is to broaden; if you are going into Internal Medicine, take Surgery and Pediatric courses. This will be your last exposure to them, and they can be very important to later practice. You will gain competence in your chosen field during residency.

The Basic Radiology Clerkship is the most frequently taken course in the fourth year, primarily because there is little formal teaching of Radiology in the required portion of the curriculum.

Radiology rounds

The Department of Medicine has organized its medical service along subspecialty lines — the "-ologies" (Cardiology, Dermatology, Endocrinology, Gastroenterology, Hematology, Nephrology, Neurology, Pulmonary Disease, and Rheumatology). Each of these services offers a fourth year rotation with its own work rounds, teaching rounds, conferences, and seminars; all of these are extremely popular with fourth year students especially Cardiology and Dermatology. The other departments also have attractive month-long courses such as Office Gynecology (Ob / Gyn), Pediatric Infectious Disease (Pediatrics), and Trauma Service (Surgery). Surgery, like Medicine, has attractive subspecialty rotations — Otolaryngology, Orthopedics, and Pediatric Surgery.

Several departments have developed one to two credit hour courses to be taken while a student has primary ward responsibility on another service. Most of these have a seminar format and aim at providing the student with a working knowledge of the topic but very limited actual clinical experience. Some of the most popular ones include Medical Ophthalmology (1 hour), Urologic Disease and Technique (2 hours), Clinical Neurology Seminar (2 hours), Physiology of Nephrology (1 hour), Clinical Dentistry (1 hour), and Basic Neurosurgery (1 hour).

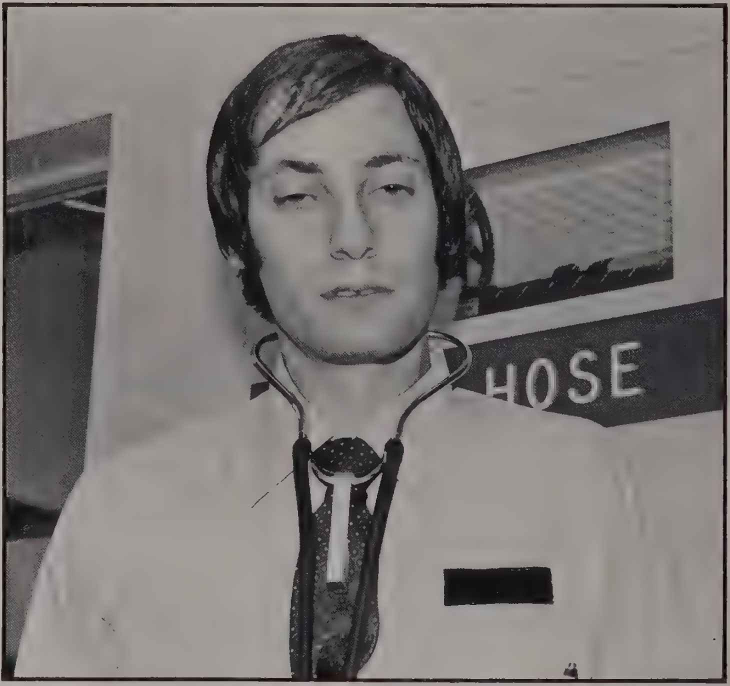


Dr. Stead on cardiology rounds

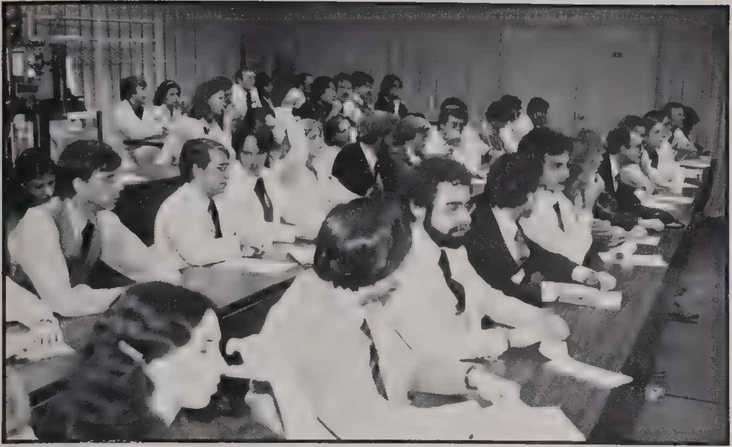
Finally there are advanced general rotations if the student desires them. Surgery and Medicine have "sub-internship" experiences which are overview courses emphasizing the student taking over as an intern with greater patient responsibility.

The fourth year, like the second year, meets with little criticism. The concept of clinical tracts has been suggested, but course offerings are diverse enough that most students can create their own specialty tract if they want an in-depth area experience in clinical medicine.

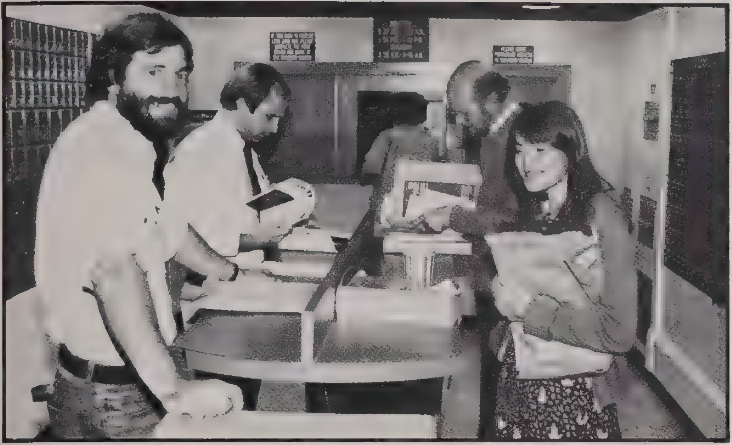
Thus, a student, when he / she finishes these four years and passes Parts I and II of the National Boards, proceeds to residency training in which Duke students traditionally have done extremely well. Duke Medical School views its purpose as twofold: to provide students with specific tools to do well in these residency programs and to teach an approach to a clinical problem that will be applicable throughout one's practice even when technology and treatment regimens change. Only by continually questioning and challenging ourselves can we continue to fulfill these goals.



Droopy-eyed, sleep-deprived sub-intern


Grand Rounds at the V.A.

Typical line at the Pink Lady


The mailroom, a popular gathering place for students and residents

Checkout at the cafeteria

Atypical parking lot; note empty space, left center

COMBINED DEGREE PROGRAMS

The M.D.-Ph.D. was the first combined degree program at Duke. Planned concurrently with the new curriculum, the Medical Scientist Training Program (M.D.-Ph.D.) was intended to produce faculty for the many new medical schools throughout the country. Basic science professors are frequently criticized for teaching esoteric research without demonstrating its clinical application. By training faculty of the future as both a physician (M.D.) and a researcher (Ph.D.), the hope was to produce quality researchers who understood the need and desire for relating their research to the study of the patient. Between six and ten students are admitted annually from an applicant pool of over 300. Criteria for admission include outstanding grades and MCAT scores, in addition to quality research experience. The program has been funded by the Department of Health, Education, and Welfare.

The M.D.-Ph.D. student (pronounced Mud-fud) takes the same first year as regular students and completes three clinical rotations. He/she then takes graduate school courses for four months before finishing the last two clinical rotations. The next two and a half to six years are spent doing her/his research and writing and defending the dissertation. The student then returns for one last year of medical school, which is the year of clinical electives.

The program admitted its first class in 1966 and has worked exceptionally well graduating excellent researchers, many of whom are just getting out of their residencies. To date, there have been 67 graduates of the Medical Scientist Training Program.

Emmett Schmidt, M.D., Ph.D.

Another Ph.D. program has developed as an outgrowth of the Medical Scientist Training program — the Medical Historian program. It leads to a Ph.D. in the History of Medicine and is six years in duration. Established in 1967, the Medical Historian program has had five graduates. It is completely funded for tuition and stipend by the Macy Foundation.

Jackie Rutledge, M.D., J.D.

The M.D.-J.D. program was initiated in 1968 and remains the only formal joint medical and law program in the country. The student attends the first two years of medical school (one basic and one clinical year) and then enters the first year of law school. In the fourth and fifth years of the program the student studies law primarily, but intersperses it with basic science courses from the medical school. The student then returns, as in other combined degree programs, to the medical school for a final year of clinical electives. Three people have graduated from this program so far.

The program has met with only limited success due primarily to no funding for students or faculty. The desirability of the program is substantial, with over fifty candidates applying annually for the maximum of three slots. The program will remain nationally renowned but pragmatically non-existent until adequate financial support is located.

The M.D.-M.P.H. program was begun in 1967 between the Duke Medical School and the University of North Carolina School of Public Health. In this program the student pursues the first two years of the regular Duke Medical curriculum, then in the third year he/she enters the Public Health School. This usually requires a year and a half to two years to complete the courses and a Master's thesis. The student receives six months of elective credit for this experience, half counting as basic science and half as clinical. The student then must complete two-thirds of a year in both basic science and clinical electives. A similar program can also be arranged with Harvard's School of Public Health. Six graduates have completed this program.

The final "established" combined degree program is with the Duke Public Policy Institute. In this program the student receives a combined M.D.-M.P.P.S. (Masters in Public Policy Sciences). As with the M.P.H. program, the student takes a traditional first two years in medical school, then starts into the Public Policy Institute at Duke. The Public Policy program usually takes about a year and a half, and then the student returns to half a year of basic science and a final clinical year. Two students have graduated from this program.

The diversity of these programs has been one of the ancillary benefits of the elective curriculum. A student can pursue these auxiliary programs during the third year, having had a background in both basic science and clinical science, and then return to the medical school for a final clinical year to tone up his / her clinical skills.

AN EVALUATION

The perennial question at Duke is how has the elective curriculum affected the quality of the medical education? This question pinpoints the difficult issue of how to evaluate the education one receives. Furthermore, if the quality of education has improved, is it because of or in spite of the elective curriculum?

One of the objective parameters often utilized is the admissions data. There is a dramatic difference at Duke Medical School, in terms of geographic background, sex, and race, between the type of students who attended in the early '60s and those attending now. In 1969, only 23 blacks applied of whom 7 were accepted and 2 actually enrolled. In 1975, only six years later, 161 blacks applied of whom 22 were accepted and 11 enrolled. The same trend is seen with women applicants. In 1965, only 55 applied, 13 were accepted, and 7 enrolled; in 1975, 864 applied, 70 were accepted, and 34 actually enrolled (30% of the entering class). As Dr. Shirley Osterhout, Assistant Dean of Student Affairs, comments, "The single greatest change in the classes over the last ten years has been the number of women." She further notes that the type of women attending has changed during the last few years — women want to be physicians not to prove something to society, but rather for the inherent sake of being a physician.

Other changes have occured in the applicant pool — grade points are higher, MCAT scores are higher, and the geographic distribution has changed. Duke also has made a commitment to North Carolina as a state and takes 30 students each year who are North Carolina residents.

Beginning in 1966, Duke made a concerted effort to attract students from the top undergraduate schools by conducting regional interviews and by sending members of the Admissions Committee on roadtrips to interview students at their own schools. Starting in 1972, one yearly roadtrip has been made to the schools whose student bodies are predominantly women. A comparison of applicants is significant:

ORIGIN OF APPLICANTS BY UNDERGRADUATE SCHOOL

1961

College	Number of Applicants
Duke	73
Davidson	24
Univ. of N.C.	20
Cornell	18
Johns Hopkins Univ.	17
Princeton	17
Dartmouth	15
Harvard	14
Emory	13
Univ. of California	10

1965

College	Number of Applicants
Duke	65
Harvard	31
Univ. of N.C.	28
Princeton	27
Dartmouth	23
Rutgers	21
Cornell	20
Yale	20
Univ. of California	19
Univ. of Pennsylvania	18

1971

College	Number of Applicants
Duke	121
Harvard	64
Univ. of N.C.	56
Columbia	51
Yale	41
Princeton	38
Cornell	33
Davidson	33
Univ. of Pennsylvania	33
Univ. of California	29

1975

College	Number of Applicants
Duke	198
Harvard	117
Yale	105
Univ. of N.C.	104
Princeton	95
Johns Hopkins Univ.	94
Stanford	90
Cornell	77
UCLA	73
MIT	70

Dr. Shirley Osterhout

APPLICANTS FROM NORTHEASTERN SCHOOLS

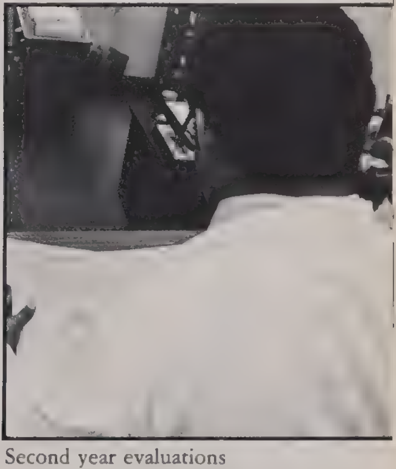
School	1961	1965	1971	1975
Amherst	5	5	16	30
Brown	-	9	22	52
Columbia-Barnard	5	15	51	81
Dartmouth	15	23	25	56
Harvard-Radcliffe	14	31	79	140
M.I.T.	-	-	28	70
Mt. Holyoke	-	-	5	18
Princeton	17	27	38	95
Smith	-	-	8	15
University of Pennsylvania	8	18	33	66
Wellseley	-	-	5	29
Wesleyan	-	6	-	12
Williams	-	8	21	31
Yale	9	20	41	105
Total	73	162	372	800

Thus applicant statistics show that Duke is attracting more blacks, women, and students from prestigious undergraduate schools.

Duke, however, is now facing the financial problem that all private medical schools across the country are faced with. As Dr. Syd Osterhout, Dean of Admissions, comments, "The immediate future presents problems with finances, and these problems will have an effect on the selection process. We are, however, committed to keeping Duke a medical school which middle and lower income students can attend."

It is quite difficult to evaluate the curriculum using grades at medical school. Duke is on an Honors-Pass-Fail grading system. In addition to this grade each course must submit a written evaluation on each student. This method of evaluation is far more valuable than a numerical or letter grade because the written evaluations let a student know his/her strong and weak points and how to improve them. Because of this grading system Duke does not rank its students or give a percentile. As seen in the following section on residencies, this grading system does not seem to have impeded Duke students' ability to obtain excellent residency positions. This type of evaluation makes a comparison with pre-1966 students based on grades impossible.

Dr. Suydam Osterhout



Second year evaluations

National Board scores are another mode of evaluating a medical curriculum. This mechanism is also not particularly applicable to Duke. The original purpose of the elective curriculum was to provide students with a working vocabulary with which to tackle the second year clerkships. Consequently, in 1974 and 1975, the classes did not excel on the National Boards. Starting with the graduating class of 1979, passage of Parts I and II of the National Boards Examinations became mandatory for graduation. This appears contradictory to the spirit and goals of the elective curriculum and is poorly accepted by the students.

A final means of objective evaluation is by residency positions. The type and quality of residency programs has changed considerably in the last fifteen years:

Residency positions are now determined by a computerized matching procedure in which students and medical centers each list their top choices, and they are then matched. In 1978 82% of Duke students matched their first or second choice; in 1979 86% received one of their first three choices.

By any of these parameters Duke students are doing excellently and certainly have not suffered (objectively) because of the elective curriculum. But the elective curriculum is far from perfect . . . as will be discussed under the following section on Problems.

MEDICAL CENTERS MOST FREQUENTLY CHOSEN FOR INTERNSHIPS BY DUKE GRADUATES

1960-64

Rank	Medical Center	Number
1	Duke University	148
2	U.S. Military	30
3	Emory University	11
4	Alabama	10
5	Med. Coll. Virginia	9
6	Cornell University	8
7	Johns Hopkins	7
8	George Washington	7
9	Philadelphia General	7
10	Watts Hospital	7
All other		141

1970-74

Rank	Medical Center	Number
1	Duke University	165
2	Harvard University	18
3	Cornell University	14
4	U.S. Military	13
5	North Carolina	10
6	Univ. of Pennsylvania	9
7	Washington University	8
8	Johns Hopkins	7
9	University of Utah	7
10	Emory University	4
All other		185

1978-79

Rank	Medical Center	Number
1	Duke University	57
2	Harvard University	13
3	Univ. of Alabama	10
4	Vanderbilt University	9
5	North Carolina	7
6	Colorado	6
7	South Carolina	6
8	Calif.-San Francisco	5
9	Cornell University	4
10	Yale University	4
11	Johns Hopkins	4

Students and parents at med center party

INTERNSHIP AREA OF RECENT GRADUATES

	1978	1979
Internal Medicine	49	39
Surgery	13	18
Pediatrics	11	13
Family Practice	10	16
Pathology	9	7
Obstetrics & Gynecology	5	4
Radiology	5	2
Psychiatry	5	7
Public Health	3	0
Anesthesiology	1	2
Other	3	2

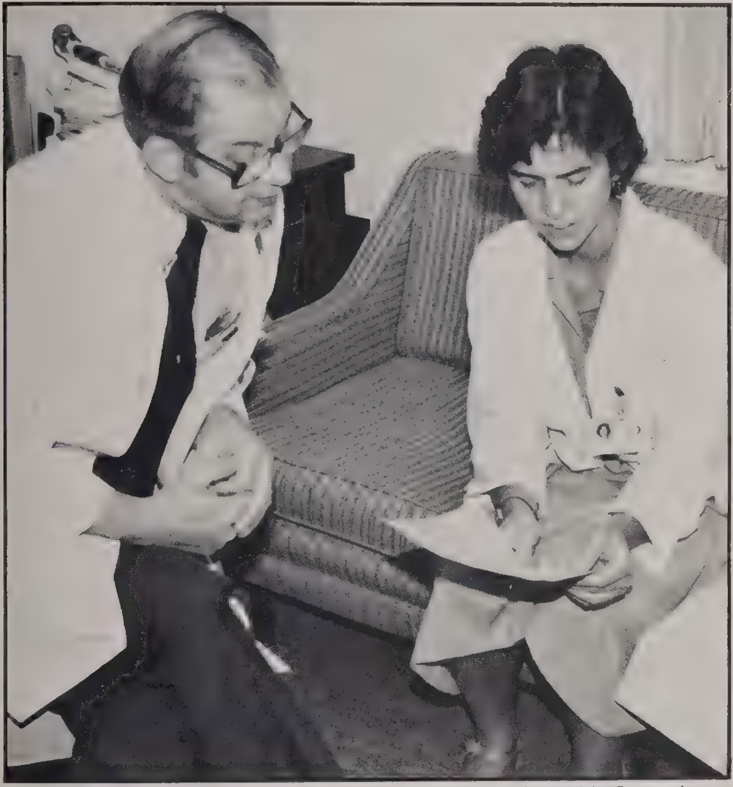
Lynn Fromme, Dr. Ronald Riefkohl

PROBLEMS

The elective curriculum was, and is, an enormous accomplishment of innovation. However, it is by no means free of problems and pressures. Most of the existing problems represent a hesitancy to allow, much less promote, the natural evolution of the curriculum. The mandatory passage of Parts I and II of the National Boards has already been cited as a major area of dissatisfaction. A second frequently addressed problem is that of the poorly motivated student. This issue is obviously directly tied to another area of concern — the advising system. The elective courses are the keystone to the Duke curriculum and one's view of its success or failure is usually directly related to his/her own experience, If the student has had an exciting and outstanding third year, he/she usually sees the entire curriculum as being equally outstanding. Conversely, an unproductive, discouraging third year typically draws words of dissatisfaction on the curriculum as a whole.

The best way to attack this problem appears to be through improving the advising system. If we can educate the advisors as to the different approaches to the third year and the advantages and detriments of each, then hopefully the problem of directionless students will be at least ameliorated. The quality of the advising system, however, has been a perennial problem. Frequently, the advisors are poorly informed as to the options and have little personal information on different practice modalities. As one alumnus pointed out, "Not one of my advisors had ever been in private practice!" A concerted effort to improve and educate the advisors for third year, fourth year, and residency programs should be a top priority.

Nancy Milliken at evaluation for third and fourth year curriculum


Dr. Christakos with Gwen Arens

A third problem commonly cited by alumni and students alike is the lack of exposure to primary care: "More time should have been spent on exposing students to primary care facilities;" and "I do not think we will ever pay any more than lip service to primary care until the care of the patient becomes as important as the pursuit of research." Whereas some improvements have been made, there still remain few role models of primary care physicians or primary care practice.

Finally, certain topics are still poorly covered, if even mentioned, in the curriculum — nutrition, cost awareness, occupational health, preventive approaches to health, medico-legal issues, and aging and geriatrics. A student could easily graduate from Duke with her/his only contact with these topics having been a lecture or two in the first year.

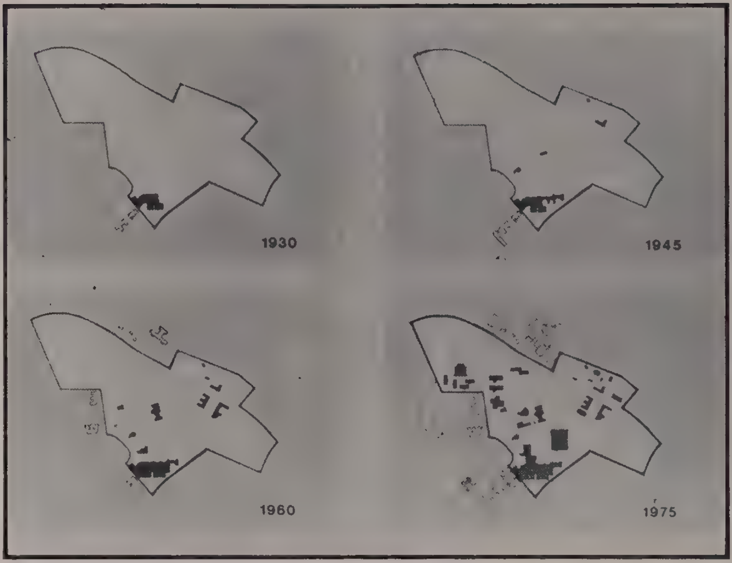
New Family Practice Building

PHYSICAL FACILITIES

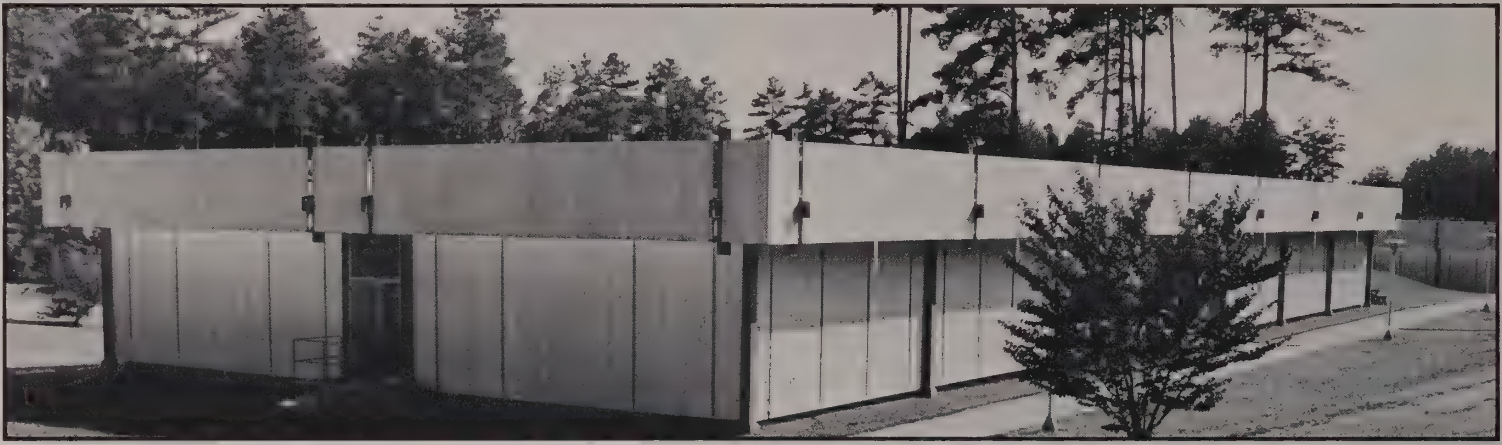
The progress made in the curriculum during the last fifteen years has been met by an equally impressive advancement in the physical plant of the medical center. The figure at the right graphically depicts this growth.

Research is one of the areas which has increased most dramatically. In 1968 the three-building Research Park was begun, with a fourth building and vivarium added in 1969. These currently house neurological, cardiovascular, and immunological research.

The next research development was the Medical Science Buildings. Located across Science Drive from the Research Park these three buildings are now the backbone of much of our medical research. Medical Sciences I, the Nanaline H. Duke Building, is primarily for biochemistry; Medical Sciences II, the Sands Building, is primarily for anatomy; and Medical Sciences III, the Jones Building, is primarily for immunology and micro-biology.



Sketch of Duke Hospital expansion from 1930 to 1975



One of four buildings in Research Park

Medical Sciences Buildings, left to right: Jones, MS III; Sands, MS II; Duke, MS I

Vivarium

Morris Building

Eye Center

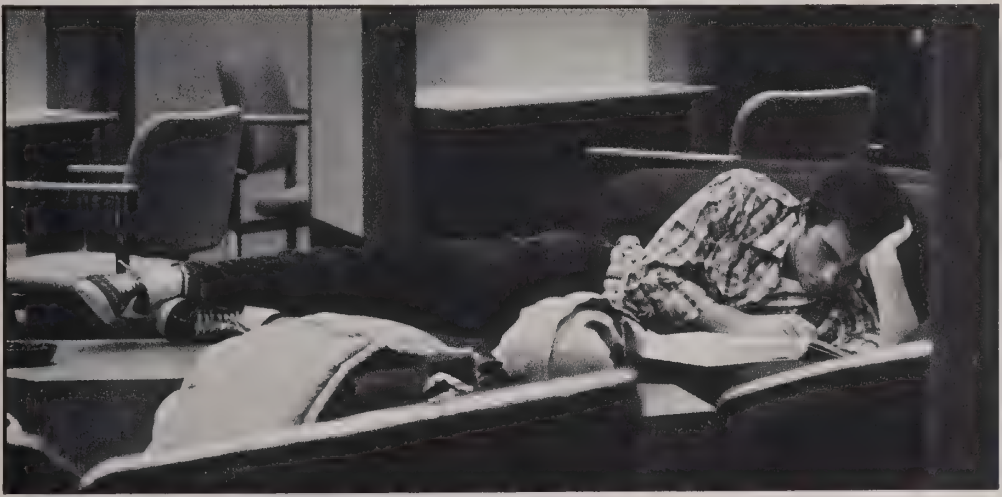
More recently, a new clinical research wing has been added to the hospital. This area, the Morris Building, focuses on clinical cancer research and patient care.

The growth of the medical center has not been limited to its research component. The Eye Center, located across from the V.A. Hospital, was built in 1971 for ophthalmologic diagnosis, treatment, and surgery.

For many years the inadequacies of the Medical Center Library were obvious. In 1978 the Seeley G. Mudd Medical Library was opened. At last students have a decent place to study when we can keep the undergraduates and law students out.

Finally keeping pace with the other developments at Duke, we now have a new parking garage on the same side of Erwin Road as the V.A. Even with its opening in 1979, students still have to pay to park.

New parking garage



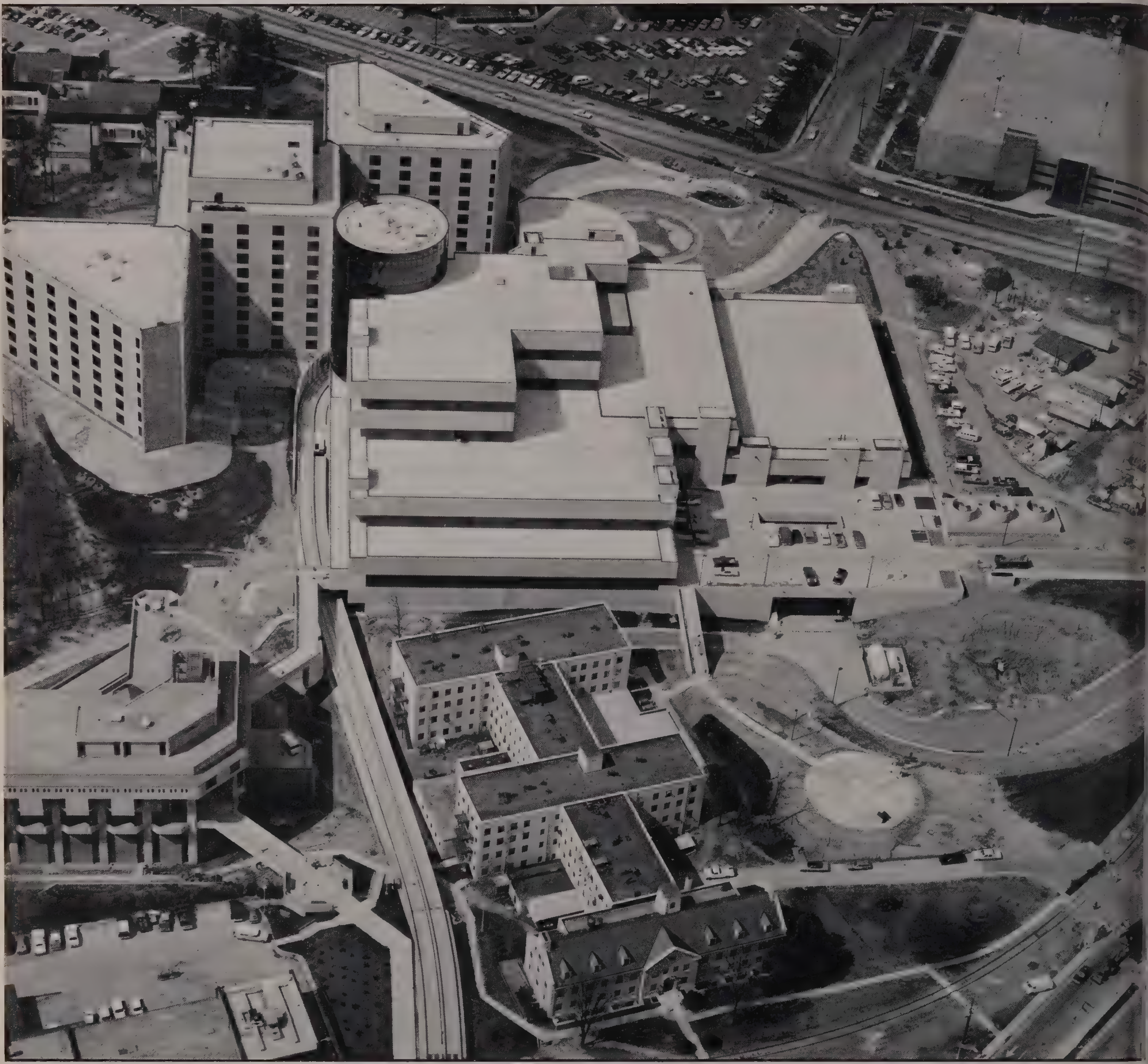
Student studying in stacks of Mudd Library

DUKE UNIVERSITY MEDICAL CENTER
COMMUNICATIONS CENTER AND LIBRARY

Mudd Library entrance

Reading room in Mudd Library

The current excitement is the expected opening of the new hospital. Predicted to open in January, 1979 . . . no, Christmas, 1979 . . . uh, no, April, 1980 . . . well, we are hoping it will be open before our next fiftieth anniversary.



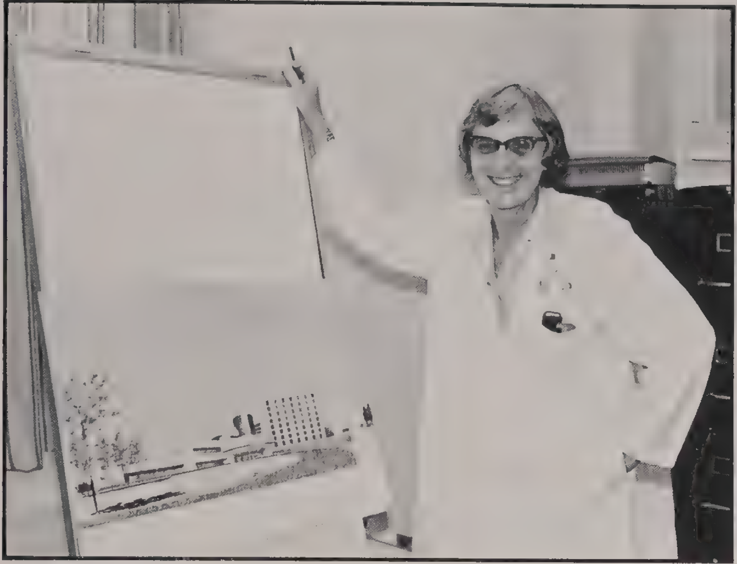
Aerial view of Duke North with Mudd Library, bottom left, Bell Building, bottom center, and the new parking garage, top right

IN CONCLUSION

Duke now has a four year elective curriculum with amazing physical facilities to complement it. Dr. Daniel Tosteson, previous Chairman of the Department of Physiology, once stated, "Effective education, however, like freedom, is a process, not a state. In order for Duke to remain at the forefront of medical education, it is essential for the curriculum to continue to evolve." It is up to us as students to promote and encourage that evolution. The medical center's excellence lies in part in its flexibility, but we can not sit idly by content with what we have created.

Jackie Rutledge

DUKE NORTH



Dr. Jane Elchlepp

The history of the development of Duke Hospital North (DHN) begins on November 22, 1970 with a decision made by the Medical Center Administration and supported by its clinical departments to proceed with the planning of new hospital facilities. The decision resulted in the authorization of a hospital planning staff, the Hospital Planning Studies Office, to coordinate all planning activities associated with new hospital facilities. The members of the HPSO were Dr. Jane Elchlepp, Associate Vice President of Health Affairs — who, in the words of the Vice President of Health Affairs, Dr. William Anlyan, "orchestrated the development of Duke North" — Wallace E. Jarboe, Larry D. Nelson, and Robert G. Winfree. This office established liaison with planning agencies and area hospitals, collected patient statistical data, and involved clinical faculty and staff and administration in developing other planning data. Over 100 reference documents having an impact on Duke Hospital were either developed or obtained from various agencies by the HPSO. In-patient and out-patient data was gathered from as far back as 1964 and was analyzed with respect to patient loads, origins, etc., in order to observe trends in the patient population. One of the more important observations, noted Dr. Elchlepp, was that patients were coming from farther and farther away — Duke was developing more towards a tertiary care hospital. The data generated also showed that in-patient services were grossly overloaded. For example, occupancy studies showed that surgery frequently ran in excess of 100% capacity, a feat made possible by the existence of a recovery room. When the in-patient functional unit analyses were compared with United States Public Health data, Duke Hospital was found to be severely lacking in both patient space and support space. The HPSO data documented the need for expansion.

The HPSO went on to identify consultants necessary to develop programs for hospital modernization. On January 14, 1972, the Executive Committee of the Board of Trustees authorized acceptance of a proposal submitted in November, 1971, by American Health Facilities (AHF), Inc., to "Develop the Conceptual Master Plan, Project Budget and Economic Feasibility Analysis of Duke Hospital."

This work was completed with issuance in March, 1973, of a four volume report, consisting of the following:

Volume I Recommendations and the Conceptual Master Plan
Volume II Role, Programs and Projections
Volume III Present Site, System and Function Characteristics of Duke Hospital
Volume IV Work Book of Alternative Analyses and Architectural and Engineering Calculations

Seven alternatives, ranging from staying in the existing hospital with minimal bed expansion, minimal new space, and maximum renovation, to total replacement of the existing hospital by a new hospital, were presented by AHF. From these alternatives, four were selected for further study:

New hospital (750 beds)
Using existing hospital as a core with some construction (no new beds)
Expansion from existing buildings to North (616 new beds)
Expansion from North (behind Eye Center) to the South (616 new beds)

Studies were done which indicated that it was functionally inappropriate and financially unfeasible to relocate the entire in-patient and ambulatory functions of Duke Hospital, including support facilities, in a new structure. No use for the vacated structure could be found and the price was not acceptable to the trustees. The alternative specifying renovation of the existing hospital with minimal new construction was also rejected on the basis that the renovation would be drawn out over 15 years. Inflation would elevate the cost to that of a new hospital. In addition the final product would be less efficient than a new construction and would not allow for appropriate expansion.

The HPSO played games with the five bed services and found Medicine, Pediatrics, and Surgery were functionally inseparable. There was much interchange between Medicine and Surgery, and Pediatrics and Surgery overlapped in the area of Pediatric surgery. It was determined that Psychiatry and Obstetrics/Gynecology could function well on their own. Furthermore, the latter two services had benefitted from the Barnes Woodall addition to the hospital during the sixties.

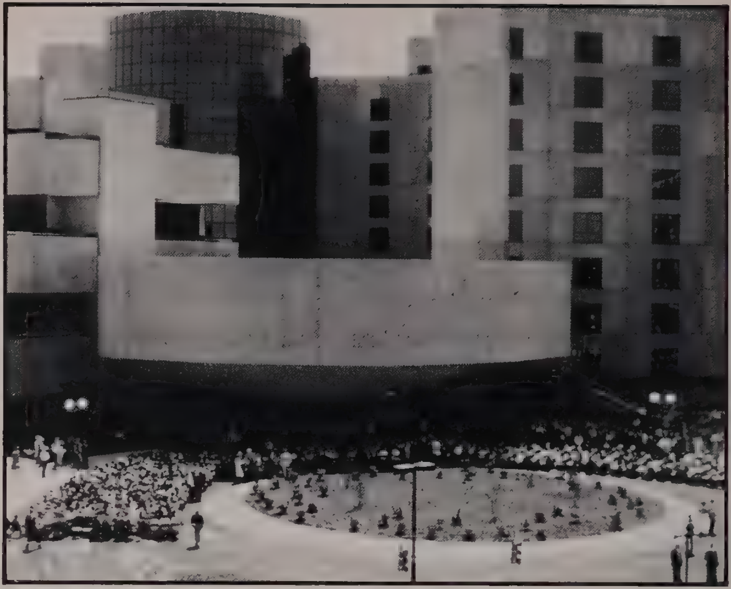
On January 19, 1973, the Hospital Advisory Committee approved as the target for fiscal evaluation the alternative called G-94 North. This alternative provided for 616 new beds and all support services, with Psychiatric and Ob/Gyn in-patient services and all ambulatory services remaining in existing buildings. The estimated total project cost was $99.6 million of which $62.1 million was directly related to new hospital construction and $6.8 million to a Personalized Rapid Transit System. The balance of the costs were for financing charges of $15.4 million, movable-equipment costs of $10.7 million, and remodeling-of-existing-buildings costs of $4.6 million. The actual cost was $94.5 million.

The four major categories of activities during the 1973-1974 period were the architectural program of space allocation, financial feasibility study, architectural selection, and construction management firm selection.

AHF was contracted to develop a detailed program of areas for the new hospital. Approximately 50 Task Force Committees composed of physicians, nurses, administrators, and appropriate hospital departmental staff were set up to work with the architects. The idea behind the Task Forces was that the people who used the hospital would contribute best to its design. While schematic drawings were developed by the architects with the help of the Task Forces, mechanical and electrical studies, structural studies, energy use analyses, traffic studies, and environmental impact studies were initiated and developed. Part of the process of schematic development involved building a mock-up of the patient room to assist in arriving at a final configuration for intermediate care rooms. Equipment use and various functional conditions were tested in the mock-up. Nursing Service personnel particularly were heavily involved in this activity.

An Architectural Selection Committee with representation from the University Trustees, Medical Center Administration, Hospital Administration, Clinical Departments, and the Uni-

Opening ceremony, L to R: Dr. William Anlyan, Mr. and Mrs. Mike Schwartz, Dr. Roscoe Robinson, and Mr. Kenneth Royall



Crowd on opening day, April 20, 1980

versity Architects' Office was established. An intensive review by this committee of approximately 34 firms was made on the basis of material obtained from the architectural firms themselves and by correspondence and phone discussions with clients of those firms. The original list was reduced to four firms, and site visits were made to projects which those firms had been involved in. In addition, all four firms made a presentation at the Medical Center on the basis of a general description of the project and a review by the firm of Volume 1 of the AHF Report. The committee finally recommended to the Administration and University Board of Trustees that the firm of Helmuth, Obata, and Kassabaum be selected to serve as architects for the Duke Hospital Project. The recommendation was accepted and the architects began working with the hospital planners who were completing the detailing of the space programming.

Membership on the selection committee established to make a recommendation for a construction management firm to handle the New Hospital Project was essentially the same as for the Architectural Selection Committee with the exception of medical staff representation. Again, firm clients and client projects, and documented capabilities were evaluated. A recommendation was made that the Turner Construction Company be selected as Construction Manager for the project. The Trustees approved the selection.

The Hospital Project Management Office (HPMO) was established at this time and to monitor the sequential processes of planning, development, and approval. With the beginning of construction in the fall of 1975, the HPMO was divided into the Duke Hospital North-Design and Construction Control Office, directed by Mr. Larry Nelson, and the Duke Hospital North-Logistics and Management Office, directed by Mr. Wallace Jarboe. These two directors were responsible to the Assistant Vice President for Planning and Analysis, Dr. Jane Elchlepp, and oversaw the activities of the architects, the construction company, and the control office inspectors.

MEMBERS OF THE HOSPITAL PROJECT POLICY COMMITTEE

Chairman	Dr. Stuart M. Sessoms Dr. Delford Stickel (alt.)
Hospital Administration	Mr. Richard Peck
Vice President, Health Affairs	Dr. Jane G. Elchlepp
Medical Staff	Dr. Ewald Busse-Chief of Staff Dr. David C. Sabiston, Jr. Dr. James B. Wyngaarden
Hospital Project Management Office	Mr. Wallace Jarboe (Exec. Sec.)
Medical Center Planning Office	Mr. Louis E. Swanson
Engineering and Operations	Mr. L.T. Matthews
Hospital Planners	Mr. William K. Henning Mr. Phil Heeter (alt.)

Duke North from Erwin Road

The result of all this work is the Duke North Building, officially opened on April 20, 1980. It is basically a three-part construction; bed towers are linked by a circulation core to the ancillary section, which houses the high technology support services.

The core, the big tower in the center of the complex, has five elevators that carry staff, visitors, and patients who can walk, three elevators that carry patients in beds and one that carries supplies. Protruding from the core at ground level is the lobby where patients are admitted to and discharged from the hospital. One of the fixtures of hospital lobbies — the big waiting room — has been replaced by several small sitting areas. Each of the three units on patient floors has its own waiting room. In the lobby are eight offices where patients make their financial arrangements. Above the lobby is a big overhang that houses three amphitheatres. The big one in the center seats 225, and each of the two flanking rooms seat 125.

On one side of the core are the bed towers. In that wing there is a floor for each of the nine levels of the core. Each of the floors is designed as a square flanked by two triangles. On most of the floors, the square central section houses an intensive care unit and the two triangular units house intermediate care beds.

The beds in the North Division total 616, and are distributed between medicine, pediatrics, and surgery as follows:

Medicine	248
Pediatrics	120
Surgery	248
TOTAL	616

The distribution of beds between intermediate and intensive care is as follows:

	INTERMEDIATE	INTENSIVE
Medicine	216	32
Pediatrics	80	40
Surgery	208	40
TOTAL	504	112

Cross-sectional view of Duke North

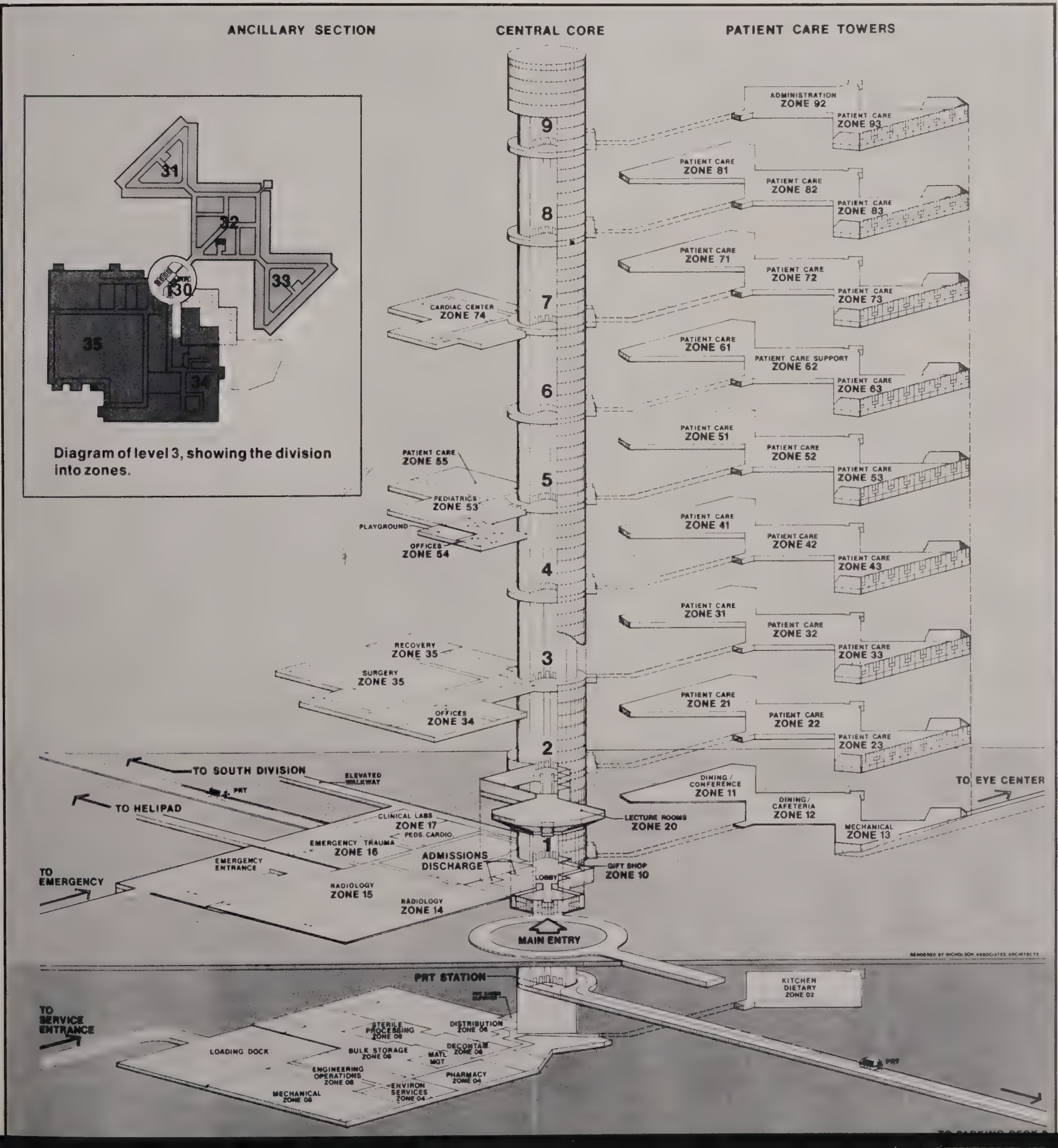
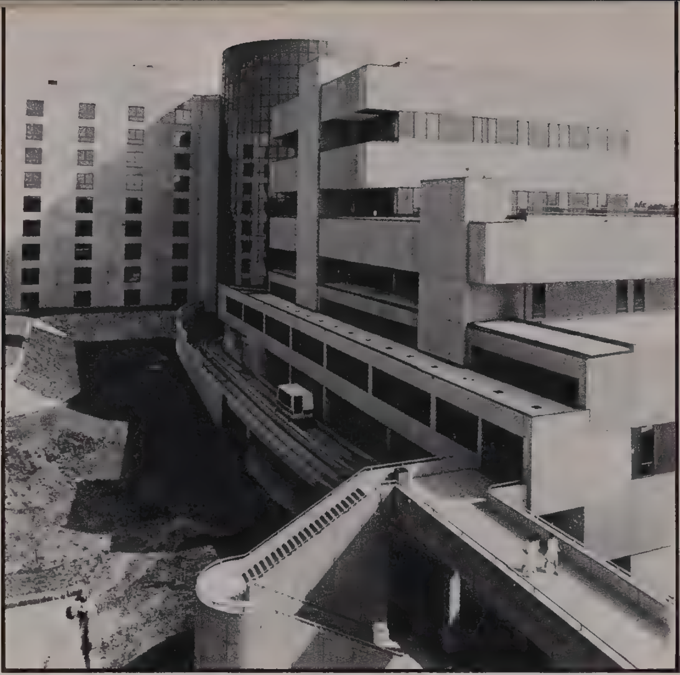


Diagram of level 3, showing the division into zones.

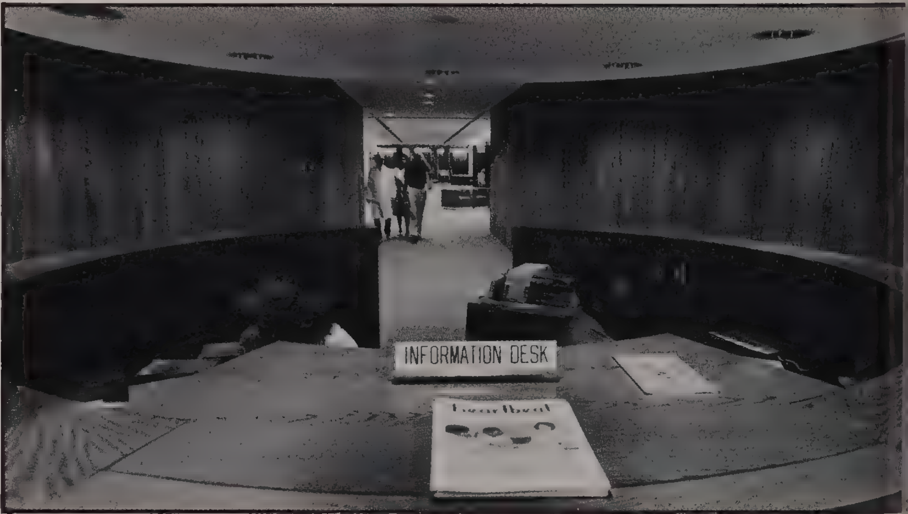


Duke North from the roof of Mudd Library

Curved hallway leading to first floor elevators

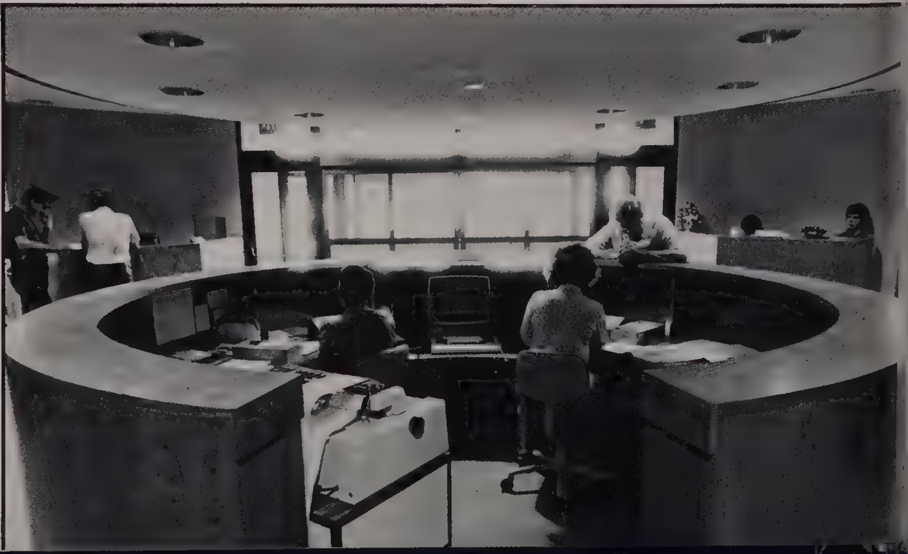
South face of Duke North

Herbarium in the main lobby



Main entrance information desk in Duke North

View as one leaves via the main entrance



In the bed towers there are 16 intermediate care units — 13 for medical and surgical patients, 3 for pediatrics. All but one unit are triangular in shape, with 32 beds in single occupancy rooms located around the exterior walls. The support space is located in the center of each triangle.

For each 32-bed intermediate care unit, the central support space contains a communications center, two stations for team nursing, two clean work rooms, and two work/report rooms. Each 32-bed unit also contains an examination/treatment room, a soiled utility room, an equipment holding room, a head nurse's office, a galley or food service room, a chief resident's office on the surgical units or a house staff laboratory on the medical units, an employee lounge and locker room, and a waiting area for visitors.

Five floors — levels 2,3,4,7 and 8 — include one 16-bed intensive care unit. These intensive care units are located in the central square.

Each floor has one or two conference rooms, house staff and student call rooms, public toilets, floor administrator/nursing supervisor offices, and on-call sleeping rooms for physicians.

Medical and nursing students have lounges, seating, and carrells. There are work rooms where physicians, nurses, and students can discuss cases in privacy.

Needless to say, the main emphasis in the design of the patient floors is patient care. Better patient care is achieved by the use of single bed units. In areas such as pediatric intensive care or neonatology there are overriding medical reasons for providing a multi-bed unit. Each room contains its own toilet and shower, a wall-mounted television, and an electric bed. At the touch of one of several buttons mounted in the siderails of the beds, patients can raise, lower and change the position of the bed, call a nurse, or turn lights or T.V. on or off. On the pediatrics wards, parents of patients may sleep on cots that fold down from the walls, Noisy voice intercoms are replaced by a silent nurse locator system. A nurse indicates his or her presence in a room by pressing a button on the wall. Patient care is facilitated additionally by a centralized assortment of medical equipment ranging from lighting controls to life sign monitors located in the head wall unit above the bed in each room. All hallways are carpeted for purposes of noise reduction.

The design of the patient care units is shaped additionally by a careful consideration of the needs of hospital staff and students. This is not surprising as the people who use the hospital had a significant part in its design. Organizational control and a sense of team spirit is fostered by the smaller units, and the dispersal of lounges and locker areas within the worker areas. Educational goals are furthered by the provision of on-call rooms, study carrells, conference rooms, and work rooms on each patient floor. Patients are grouped by disciplines to facilitate patient treatment as well as the study of the various subspecialities.

On the other side of the core of Duke North, directly opposite from the bed towers, is the ancillary section that houses the hospital's technical services and its advanced medical services. A major feature of this complex is the flexibility for change and future growth incorporated into its design. It is constructed with 63-foot clear spans and has 24-foot floor-to-floor heights, for ease in changing space utilization, as that becomes necessary. Further opportunities for growth exist in the possible expansion on the roofs of the various floors of the ancillary building. Eight foot corridors running through non-restricted areas can be extended to connect with a future doctor's office and clinic building, which can be constructed on land reserved immediately to the east of the ancillary building. Expansion of the ancillary facilities to the south is possible by demolition of the Bell Building.

The first floor of the ancillary wing houses the emergency room and the radiology department. The third floor is for surgery, the fifth floor for pediatrics, and the seventh floor for cardiac care.

The hundreds of supply items that the hospital uses enter the complex at a loading dock in the basement, are stored there, and eventually go from a distribution center to their destination.

Also in the basement is an open-top truck that takes soiled linens to the hospital laundry and a giant compactor that handles the wastes generated by the hospital. Both the linens and the wastes travel from the various parts of the hospital to the basement in pneumatic shutes.

The underlying philosophy in planning the North addition is that for operational purposes there is one Duke University Hospital with a North Division, the new building, and a South Division, the present hospital. When duplication was necessary, ancillary and support functions were divided, with a main operating location in one of the divisions, and a satellite in the other.

The North Division houses the following: the inpatient surgery suite; an imaging center comprising nuclear medicine and diagnostic radiology, exclusive of laboratories and technology training facilities; the emergency-trauma center; a clinical laboratory; the satellites of other required ancillary services, as well as the main material management function; and the central dietary operations for the entire Duke University Hospital Complex.

The existing facility, or South Division, houses 353 beds, which, together with the 39 beds in the Eye Center and the 616 beds in the North Division, bring the total bed complement of Duke University Hospital to 1008 beds. The existing facility also houses the delivery suite, the main clinical laboratory, all ambulatory clinics, most physicians' offices, most medical and allied health education activity, some medical research functions, pharmacy satellites, material distribution satellites, and dietary service satellites.

The PRT, an automated people/cargo transportation system, links the two divisions of the hospital. The demand distribution system is a conveyor system that carries small items between the North and South Divisions. These two systems, plus the extension of the Duke Hospital Information System (DHIS) to the North Division effect a functional reduction in the distance between inpatient units in the North Division and the patient care functions in the South Division.

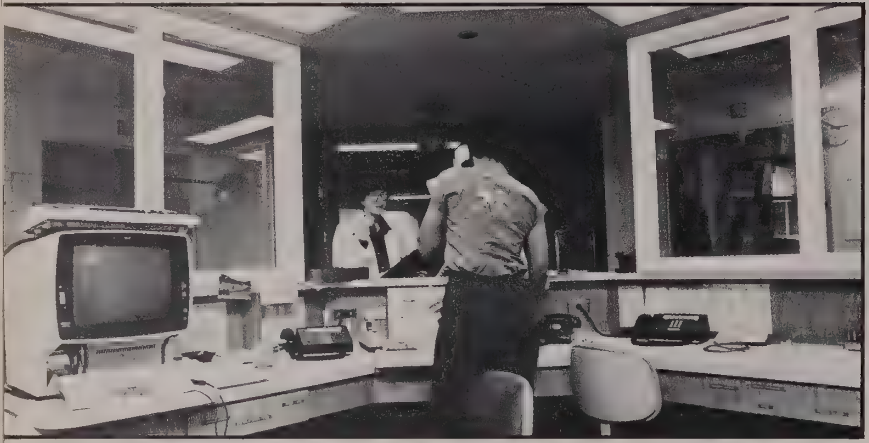
The main surgery suite is located in the North Division, with the South Division housing obstetrics/gynecology and the ambulatory surgery suite. Nineteen operating rooms and a recovery room containing twenty-eight patient spaces are located on the third floor of the ancillary section of the North Division as follows:

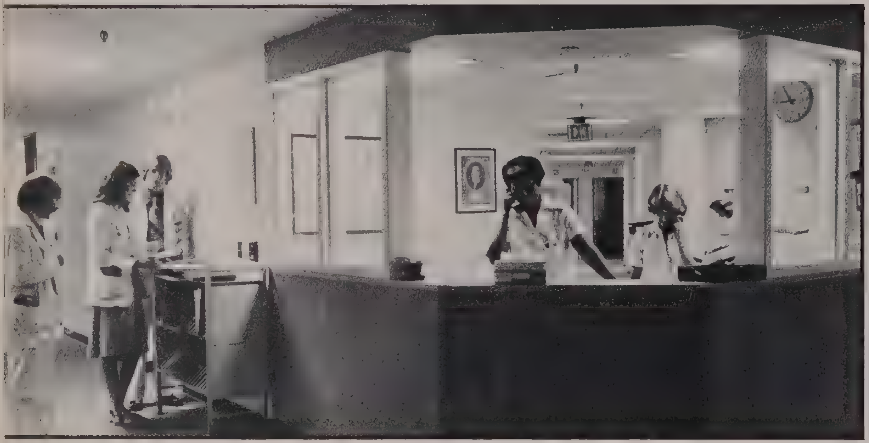
10 Major (1 with X-ray)
6 Special procedure (2 with X-ray)
1 Endoscopy
1 Urology
1 Cystoscopy (with X-ray)

Adjacent to the surgery suite are the blood gas laboratory, blood bank, and surgical pathology laboratory, all of them sized to support the North Division surgery suite. The Department of Surgery offices and the primary office complex for the Department of Anesthesiology are also adjacent to the surgery suite.

Lockers and lounges are provided for all individuals assigned for duty in the surgery suite, recovery, and anesthesia. These facilities constitute the transfer point for staff between unrestricted and restricted areas. The locker and lounge areas are designed to provide separation and privacy for faculty, nurses, house staff, and other personnel. A faculty library/lounge with dictation booths is also provided.

Patient's room in Duke North


Inside of nurse's station


Residents at work outside of nurses station

Department of Medicine library in Duke North

PRT entering Duke North from Duke South

Consultation booths, planned to accommodate the surgeon and a family member are designed so that the surgeon can remain in surgical attire while discussing the surgical procedure with the patient's family member.

Anesthesia machine cleaning and maintenance, anesthesia electronics maintenance shops, and storage space for machines are provided within the surgical suite. Space is also provided for holding soiled materials pending disposal or transfer to central processing. Shutes for the linen and trash disposal system are located in a soiled utility room within the surgery suite.

Entrance to the surgery suite restricted area is through the locker rooms for staff, and through the patient transfer station for patients.

Sterile supplies are delivered to the clean controlled work area via a dedicated clean cart elevator from central processing, on a cart-per-case basis. Flash autoclaves are available in the clean work area with direct access to the operating rooms, so dropped instruments can be sterilized. At the termination of each surgical case, supplies are used instruments are returned to the decontamination room in central processing via a dedicated soiled cart elevator.

Patients are brought to the surgery suite by a transporter. The patient may receive medication or special surgical preparation in the preoperative holding room — ten patient spaces — and held under supervision there until an operating room is available; or the patient may be taken directly to an induction room, six of which are located adjacent to the special procedure rooms and four adjacent to major rooms.

When the operative procedure has been completed, the patient will normally be transported to the adjacent recovery suite. The recovery suite contains two isolation recovery rooms and 26 recovery spaces in a large open recovery room.

The emergency-trauma center is located on the first floor of the ancillary building. It has 37 patient treatment and observation spaces:

3 Major trauma spaces
4 Minor trauma spaces
1 Cardiac treatment room
1 Resuscitation room
4 Cast room positions
2 Security exam rooms
1 Endoscopy room
1 Poison exam room
12 Multipurpose exam rooms
8 Observation spaces

A special access road leads from Erwin Road directly to the emergency-trauma center. A dedicated elevator goes directly from the emergency-trauma center to the surgical suite. A heliport is located at ground level adjacent to the trauma center entrance, and connected to it by a bridge over the service road.

The center is planned as a major regional referral service for the most seriously injured or ill patients who are triaged by ambulance services or who arrive by private vehicles and helicopters.

The blood bank in the North Division is on the third floor, ancillary section, adjacent to the surgery suite. It supports the surgery suite, emergency trauma center, intensive care units, and other requirements in the North Division. A blood bank still operates in the South Division. Procedures are split between these two areas as follows:

NORTH DIVISION	SOUTH DIVISION
Blood Cross-matching	Donor area
Storage of blood	Plasmaphoresis
Platelet provision	Blood processing
Frozen blood provision	Platelet procurement
	Frozen blood
	Immunohematology
	White cell procurement

Blood gas analysis for the intensive care units and for the surgery suite is provided by the blood gas laboratory located on the third floor of the ancillary section close to the surgery suite. In addition, satellite blood gas labs are stationed in the cardiac care unit on the seventh floor, in the general medical intensive care unit on the eighth floor, and in the pediatric-neonatal intensive care unit on the fifth floor.

Also located adjacent to the surgery suite is the surgical pathology laboratory, handling frozen sections, log-in of specimens, and gross sectioning and dictation. Functions still performed by the surgical pathology laboratory in Duke South are histology slides reviewed by staff, dictation from microscopic section, and ob/gyn and ambulatory surgical frozen sections, bag-in specimens, and gross sectioning and dictation.

The North Division clinical laboratory is a minimal facility designed to serve emergency-trauma patients and North Division in-patients. The main clinical labs are located in the South Division. Clinical laboratory procedures performed in the North lab are restricted to critical or emergency procedures in which the results can be determined immediately. The lab is located close to the emergency-trauma area.

On the same level in the bed tower of the North Division as the neurology and neurosurgery patient care beds is located the electroencephalograph laboratory. There are three screened EEG examination rooms and one EMG examination room which serve all patients in the North Division of the hospital. All out-patients and those in-patients remaining in the South Division are served by the EEG facility in the South Division.

The main respiratory therapy area in the North Division is located on the sixth floor. In addition, there are four satellite respiratory therapy storage rooms located adjacent to and on the same level with the respective intensive care units they serve. These facilities provide for all in-patients within the North Division. The satellites function as equipment holding rooms only, so no patients treatments will be given in these rooms. Each room will be used strictly for supporting the activity of giving respiratory therapy treatments in the patients' rooms and the patient treatment room.

The respiratory therapy area in the South Division provides for all out-patients plus those in-patients being cared for in the South Division. The same applies for the physical therapy unit there, which is the main unit. The satellite physical therapy in the North Division is located on the sixth floor near the orthopaedic beds on that floor. It is also located adjacent to the orthotics and prosthetics in order to allow sharing of employee facilities.

The physical therapy treatment areas which are provided are three treatment positions, an open exercise area, and arm, leg and lowboy whirlpool hydrotherapy. In addition, the general surgical intensive care unit on the second floor has been provided with the hydrotherapy facilities required for burn patients. The treatment room for the burn unit contains utilities for two portable whirlpools.

The orthotics and prosthetics area on the sixth floor is a satellite of the main unit in the South Division and functions only for fitting and performing minor modifications of artificial limbs and braces for the in-patients of the North Division.

Close to the renal disease in-patient unit on the ninth floor is located the acute hemodialysis unit. Six patient spaces are provided, two in private rooms and four in one open room. In-patients will be moved into this unit and held temporarily for therapy only. When patients cannot be moved to this unit, they will be given treatment in their rooms by use of portable equipment.

A specialized hematology laboratory for pediatrics is situated in the ancillary section on the fifth floor. The facility is separated from the other hematology laboratories because of the specialized collection and specialized procedures required for pediatric patients.

There are thirty-six radiology imaging rooms in the main radiology suite of the North Division, located on the first floor in the ancillary section. Portable fluoroscopic units and portable radiographic units are also planned for this division. These facilities constitute the in-patient radiology imaging support for the North Division. In-patient support for the services remaining in the South Division and the majority of the ambulatory radiology imaging are provided by the South Division radiology imaging services.

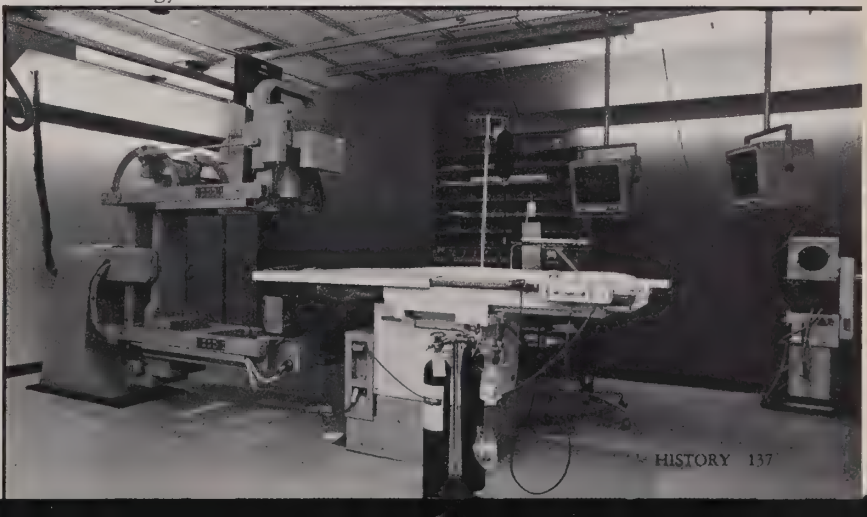
The department is designed so that all imaging modalities consisting of radiography, CT scanning, nuclear medicine, and ultrasound are incorporated into a common imaging division. Patients enter the department through the patient receptionist area and then are moved directly around the periphery of the department to a patient staging and dressing area immediately adjacent to the appropriate imaging room. The communication and control desk in the work core maintains communications with all imaging rooms to control the flow of patients in and out of the department, based on the capabilities and workleads of each room. A waiting room is located adjacent to the patient receptionist area for temporary holding of patients entering and leaving the department and for companions waiting for patients undergoing radiologic procedures.

The radiology staff moves between rooms through a common work core serving each block of imaging rooms. This work core is restricted to technologists and radiologists and effectively separates staff and patient traffic. This work area contains reading stations, supply carts, data processing terminal, and crash cart, and is the work station for supervising technologists. Accessible to the work area are viewing and conference rooms for radiologists and referring clinicians.

The central films file for radiology is located in the South Division. The film file space in the North Division is limited to filing of active cases in that division. When a patient is scheduled to be admitted to the North Division, admitting and discharge notifies the main film file room in the South Division; the patient's film folder is pulled and sent to the North Division film file room where it remains until the patient is discharged or transferred to a bed in the South Division. The film file is then returned to the South Division after all films have been returned to the folder.

The cardiac center is located on the seventh floor of the ancillary section of the building. Space is provided for an adult cardiac catheterization laboratory, cardiac information services, a heart station, and offices for the cardiac center staff. These facilities and a cardiac care unit on the seventh floor of the bed towers and a heart station in the South Division for ambulatory patients function as a comprehensive cardiac center for Duke University Hospital. The cardiology information service stores and retrieves all data generated on both in-patient and ambulatory patients seen by the center. The North Division heart station supports EKG, vector, phono, echo and stress exercising functions. There are phone jacks connected to a computer from each patient room in the North Division so that the physiological information can be recorded and stored centrally.

Vascular radiology room in Duke North



The pediatric cardiology laboratory along with the pediatric pulmonary function laboratory is located on the first floor directly adjacent to the vascular special procedures area of the radiology imaging division, which permits the use of restricted areas and sharing of reception, waiting and blood drawing facilities for pediatric age cardiology and pulmonary function patients.

The North Division central pharmacy issues drugs to all the areas serviced in the North Division and houses the main administration offices for the pharmacy department of Duke University Hospital. It also functions as the major receiving and storage area for the pharmacy for drugs and supplies. It is located on level 0 near central processing, distribution and storage. Satellites are located in the pediatric, surgical, and medical inpatient areas, in the surigical suite, in the emergency-trauma center, and in the Eye Center.

Other functions, such as manufacturing and packaging, unit dose packaging and repackaging into suitable issue units from bulk containers, sterile manufacturing and sterilizing of the hyperalimentation solution, is performed in the South Division and is supplied to both the North and South Division pharmacy areas. Quality control for these manufactured items and for packaged and repackaged units is also done in the South Division pharmacy. The South Division also has satellites in the minimal-care in-patient area, in the Morris building, in the ambulatory clinics, and at central pharmacy, which functions as a satellite and as a central pharmacy for several functions.

Satellites serving in-patient units function as the ordering, receiving and input mechanism into the DHIS system for the unit dose dispensing system. These satellites also update the cart cassettes and they furnish emergency and stat dosages. Also, the in-patient satellites are where all orders are reviewed on the patient's profile for accurate dosing, drug interactions, and in certain instances for the correct drug.

Surgery suite satellites issue all anesthesia items, except gases, including the controlled drugs to the anesthesia department and the surgery suite. All drugs to the OR's are provided from this area. The satellite also provides drugs to the recovery and pre-surgery holding area. In the North Division, this satellite is located so there is a dispensing window directly into the recovery room area, eliminating the need for a requisition or charge voucher or a medicine cabinet. The pharmacy dispenses the material and maintains all records which eliminates the need for nursing personnel to keep records. The emergency trauma center satellite operates a special shift to cover the heavy evening hours.

Nursing service and hospital administration in the North Division are satellites of the main offices, which remain in the South Division. Associates oversee the administrative activities of the North and South Divisions. Only those hospitals and nursing service administrative functions essential to the operation of the North Division are located there. Because of their common concerns and activities, nursing and hospital administration are located adjacent to each other on the ninth floor. This permits the free exchange of information and the sharing of common support areas.

The admitting and discharge office, a satellite of the main office in the South Division, is in the main lobby, first floor, on the North Division. This area is a control point through which all North Division in-patients, except for emergencies, are admitted, and from which some patients are discharged. In the business office in the South Division are all of the patients' permanent financial and other status records.

Medical records in the North Division are also part of the admitting and discharge area in the main lobby. Space is provided for records to be held prior to being transported to the point of use within the North Dvision. Records are returned to this point after use, to be transported to other medical facilities within the North complex, or back to the main medical records department in the South Division.

An entry vestibule and altar area, constituting the North Division chapel are located on the sixth floor. The chaplain service for the North Division provides a chapel where patients, relatives, visitors, and staff members may meditate at any time and where daily services open to the public are held. Private consultation with the chaplain is also available.

The North Division has three auditorium/classrooms in the overhang above the main entrance. They are reached by stairs from the entrance lobby or by a bridge across the entrance lobby from the second level elevator lobby. These areas provide tiered seating, a patient holding room, and projection booths. There are two 125-seat auditoriums, and one 225-seat auditorium.

There are four conference dining rooms adjacent to the dining area on the first floor. Two seat 16, one seats 35, and one seats 50. There is also a conference room seating from 20 to 30 on each floor that houses in-patients units.

The large auditorium/classrooms are designed to accommodate lectures and demonstrations for medical and other educational purposes. The in-patient conference rooms are for conferences related to the in-patient care services and patient-related teaching such as small rounding groups.

Students and faculty of the School of Nursing use the auditoriums and conference rooms for classes and for other activities. Book storage for Duke nursing students is provided in lockers on the first floor, near the elevators. Nursing faculty rooms are on the sixth floor. These facilities function only as satellites to the main classroom and conference activities held in the South Division and the School of Nursing.

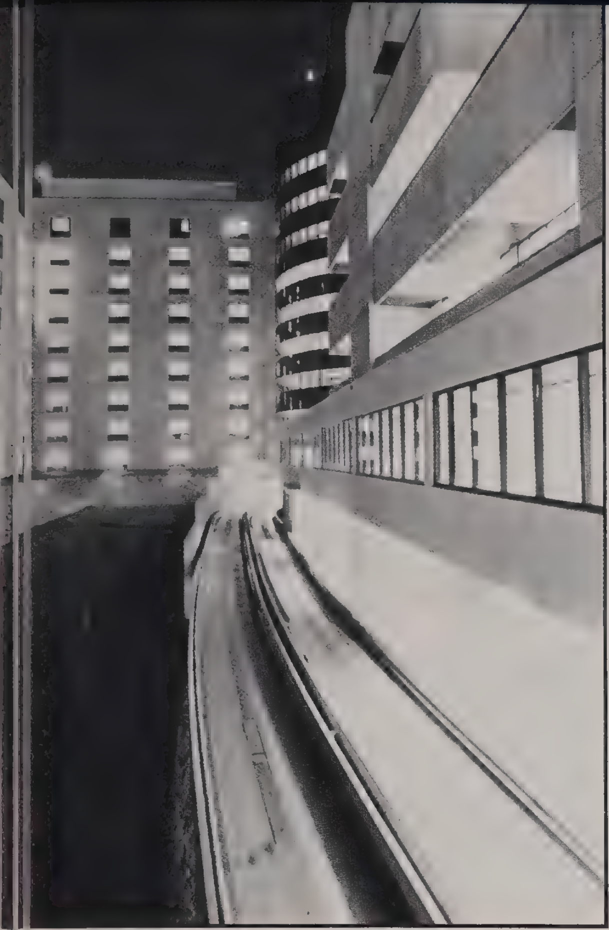
The Duke University Hospital Information System (DHIS) is an on-line computerized patient care support system which serves as a communications storage and retrieval network linking the patient care units and diagnostic and therapeutic ancillary and hospital support departments. The system is designed to facilitate, expedite and integrate the delivery of patient care services and the operations of Duke University Hospital through data processing and information management.

The North Division hardware joins the existing system which consists of 135 display terminals and 76 printing devices located on the in-patient care units in the South Division, Bell Building and Research Park.

The system is architecturally and technologically capable of enhancement and expansion of current applications as well as new development. Pending administrative and clinical review and approval, the system will be expanded to include on-line reporting of diagnostic and nuclear medicine radiology interpretations as well as surgical and cytopathology reports.

Dr. Anlyan believes that the opening of Duke North and the renovation of Duke South brings Duke Hospital up to date, and maybe even up to the 1990 medical needs. With careful consideration for space and adaptability shaping the design of Duke North, the hospital is equipped to meet future medical needs. Past experience has shown that one of the most important features of a hospital complex is, in the words of Dr. Anlyan, "the flexibility to cope with the unknown."

Tom Collier

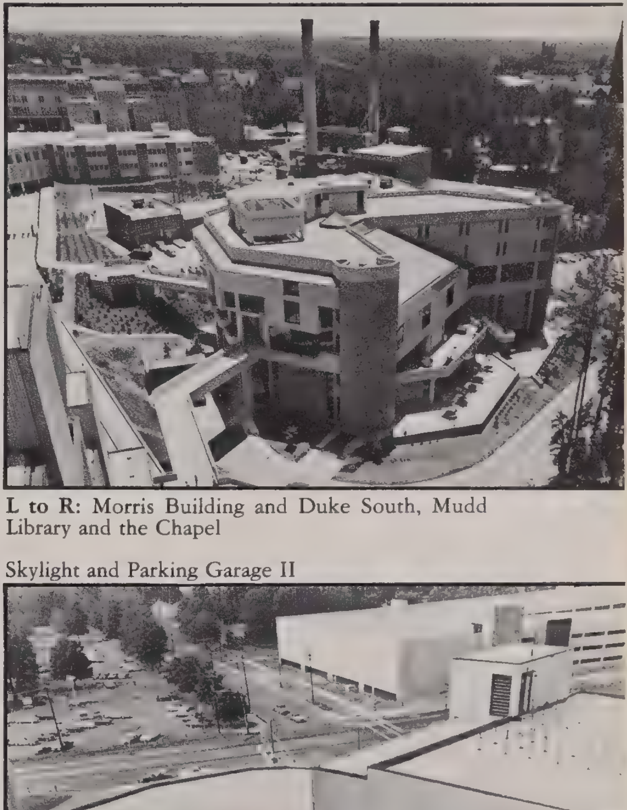


Duke North and the PRT from the library walkway

L to R: Medical Science Buildings I, II & III, the VA Hospital, Duke North and Mudd Library.

Duke North from the Emergency Drive

The east side of Duke North



L to R: Morris Building and Duke South, Mudd Library and the Chapel

Skylight and Parking Garage II

Duke North from the front entrance

ALUMNI

Originally this section was meant to include pictures of all alumni, their names, towns of residence, and areas of interest in the field of medicine; however, difficulties were soon encountered. We had pictures of all the students who matriculated, but lists of all the graduates; many students matriculated who graduated with a different class or who never graduated at all; many students transferred in who were of course not pictured with the class they graduated with; and many of the women changed names when they married. With the most up-to-date information provided by the Alumni Office, John and Marsha Lucas and I tried to match names with faces. We apologize if we incorrectly matched married names of some of the women with pictured labeled with their presumed maiden names. We also apologize if the information is not complete or correct; it's all we had.

In addition to the class pictures, we wanted to have some candid pictures of the students. In an alumni bulletin, we sent out a request for any pictures alumni wished to be included. The response was less than we would have liked, but we used what we did receive. Finally, we wanted essays on what it was like to be a medical student at Duke, both in the "official role" and in his or her "free time". We asked various people, including Dr. Jay Arena and Dr. Shirley Osterhout, to recommend former students from approximately every fourth or fifth class, and we got leads from a few other people. Although there are certainly many former students who also could have written excellent essays, we did have time and space constraints. The essays are as diverse as the students who graduated from here, and they were left much the same as we received them.

I am grateful to Marsha Adams Lucas, Pam Sholar, Jan Porter, Dr. Arena, Kim Terrell, and Janet Sanfilippo for their much appreciated help. I also wish to thank the alumni who took time to write the essays or send in pictures. Most especially, I want to give credit to John Lucas for doing more work than any of us on this section; we never could have done it without him.

A.M.L.

6

ALUMNI

Entering Class of 1930 143

Entering Class of 1934 149

Entering Class of 1938 159

Entering Class of 1942 166

Entering Class of 1946 176

Entering Class of 1950 182

Entering Class of 1954 189

Entering Class of 1958 196

Entering Class of 1962 202

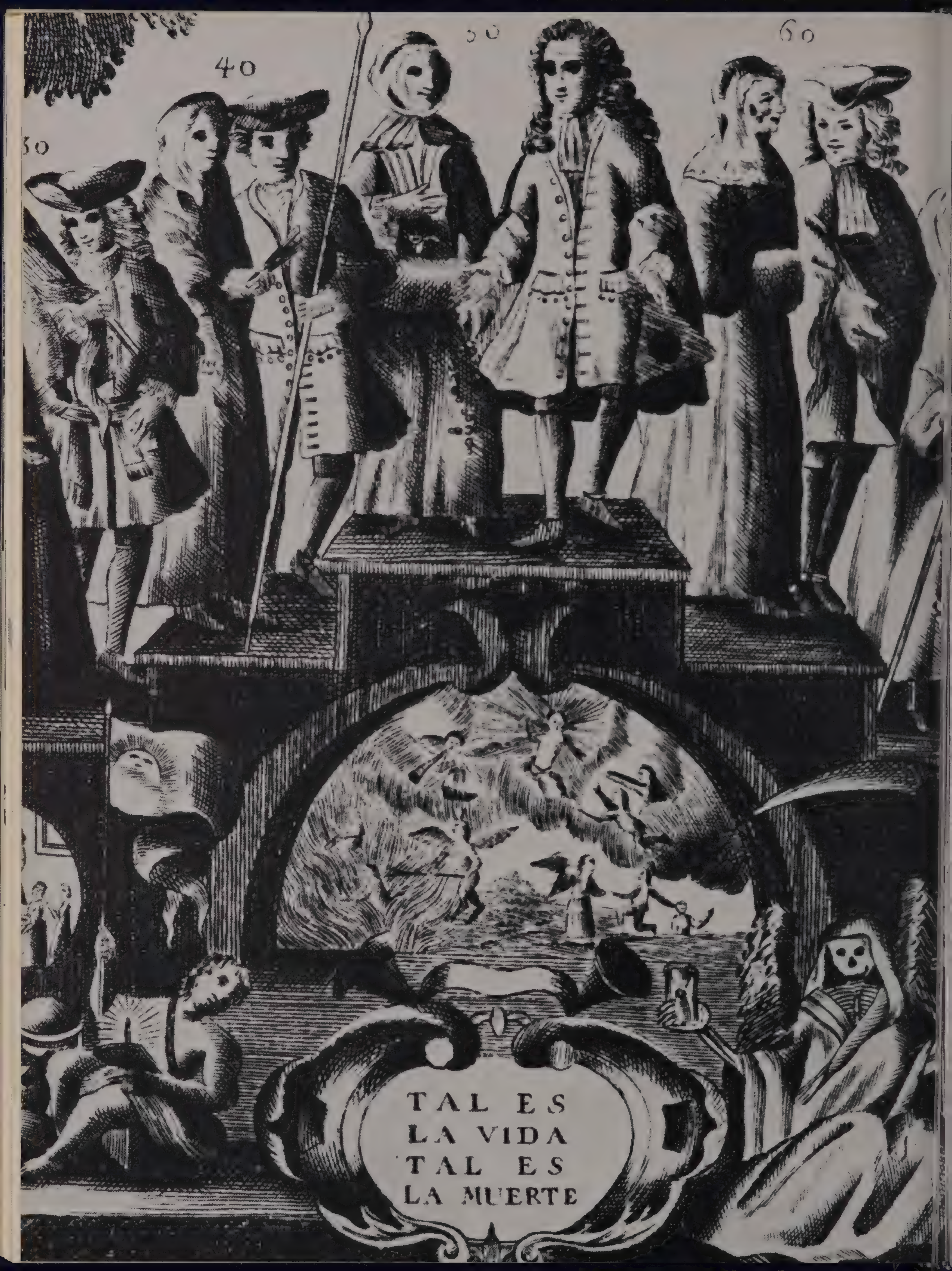
Entering Class of 1966 210

Entering Class of 1970 219

Entering Class of 1974 228

More Candids 234

Section Editor
Ann Lansing


30
40
50
60
TAL ES
LA VIDA
TAL ES
LA MUERTE

ENTERING CLASS OF 1930
GRADUATING 1932

Adams, Carlton
Winston-Salem, NC
Ob.-Gyn.

Andrew

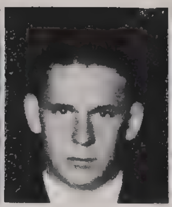
Arena, Jay M.
Durham, NC
Peds.-Toxicology

Blady, John V.
Villanova, PA
Surgery

Bowman

Dalton, Bennie
Wr'ville B'ch, NC

Depner


Du Puy, Elbert
Quincy, IL
Ob.-Gyn.

Haltom

Heinitsh, George
South'n Pines, NC

Joyner, George W.
Asheboro, NC
Surgery

Lovejoy, John F.
Jacksonville, FL

Stevenson, Ralph
Westlake Vil., CA

Upchurch, Thad.
Smithfield, NC

Walker

Ward

Wiley, Walter R.
Chesterfield, SC
General Practice

Wilkinson

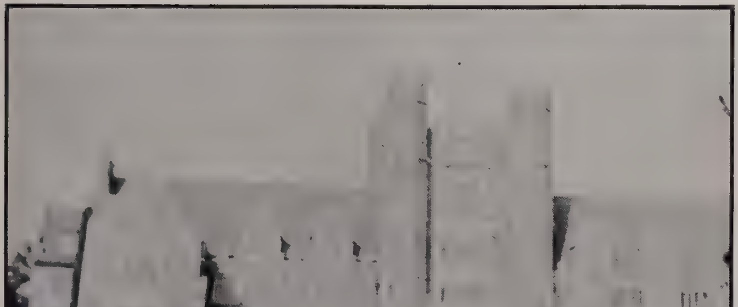
Fifty years ago it would have been easy to write this article, but now the task overwhelms me. Today, more than ever, I realize how fortunate we were to be in the first class of Duke Medical School. Fifty years ago we, the first students, had a brand new medical school with every known facility which was attached to a brand new hospital with full services, outpatient clinics and emergency rooms. We had a beautiful setting; we were part of a virgin forest; we had balmy Southern weather; and yes, even a championship football team.

I am sure the Class of 1932 was unusual because they were all nice, pleasant and friendly students; some were very smart and some of us had to work harder than others. Our class was outnumbered by the faculty, but I do not remember the exact ratio. We had no unusual pressures, and we had every encouragement. Some of us lived in the hospital and served as externs, even substituting for an intern at Dix Hill in Raleigh. The high point of that experience was the big amazon who grabbed little Stevenson is a bear hug from behind.

We were all encouraged to do visiting fellowships, and some of us did one at the Rotunda Hospital in Ireland. Some of us participated in the founding of chapters of various medical fraternities. It astounds me that we could so glibly begin the medical school traditions of this great institution. At the time, I am sure none of us fully appreciated the honor of being in the first class; there were no upperclassmen to indoctrinate us.

As I remember it, I do not think there was a single member of the faculty who was not loved and respected, especially the Dean. Dean Davison was a personal friend and a great admirer of Sir William Osler. I do not know the details of how the ivy from Dr. Osler's garden got to our Dean, but our class took part in the ceremony of planting it by the quadrangle entrance of the Davison Building. I do not think it survived! There is no doubt that the immediate success of Duke Medical School came about because of Dean Davison's leadership, his unbounded energy, and his tremendous enthusiasm.

Newton DuPuy, M.D. '32


Hospital, Davison entrance, ca. 1930

Nurses' building under construction, ca. 1930

ENTERING CLASS OF 1931
GRADUATING 1933

Ackerman, Gerald
Saginaw, MI

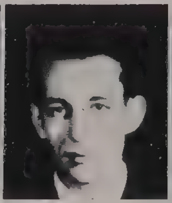
Callaway, Jasper
Durham, NC
Dermatology

Conti, Martin E.
Youngstown, OH
General Surgery

Darden, William
Northport, AL
General Practice

Donnelly, Grant
Winston-Salem, NC

Duffy, Raymond J.
Pac. Palisade, CA
Psychiatry


Gaskel

Gay, Charles H.
Charlotte, NC

Hasler, Walter T.
Soap Lake, WA
E.E.N.Y.

Kendrick

Kleckner

Lewis

Montgomery

Weatherford, W.
Pascagoula, MS
General Practice

ALSO GRADUATING WITH THIS CLASS

Pate, John R.
Arlington, VA
Public Health

ENTERING CLASS
OF 1930

Baker, John S.
Phoenix, AZ
General Practice

Blocksom, Berget
Tulsa, OK

Boyce, Oren D.
Gastonia, NC
Int. Med.-Psych

Brooks

Burwell, John C.
Greensboro, NC
Ob.-Gyn

Cherry

Dinin, Benjamin
Chatham, MA
Hospital Admin.

Easley, Eleanor
Durham, NC
Ob.-Gyn.

Farmer, Wm. D.
Greensboro, NC
Ophthalmology

Fortescue, Wm.N.
Hendersonv'le, NC

Frazer, Wm. P.
Hamilton, VA
Family Practice

Freeman, Gustave
Palo Alto, CA
Research

Godwin, Richard
Garden City, NY
Retired

Graves

Hutchison

Joyner

Mahl, George K.
St. P'burg, FL

Margolin

McMillan, Robert
Greensboro, NC
Cardiovasc. Ds.

Mikell, Robert F.
De Land, FL
Pediatrics

Parker, Edward F.
Charleston, SC
Thoracic Surgery

Peele, Talmage L.
Durham, NC
Neuroanatomy

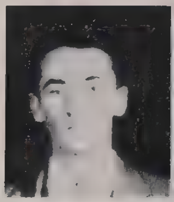
Plyler, Marion T.
Suffolk, VA

Reque, Paul G.
Birmingham, AL
Dermatology

Roberts, Louis C.
Durham, NC
Urology

Rothey

Ruby, Nathan
Brooklyn, NY
Pediatrics

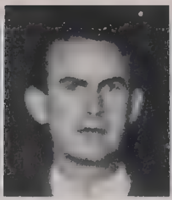

Smith, Albert R.
Columbus, OH

Strickland, B.A.
Alexandria, VA

Taylor, Waller L.
Virginia Bch., VA

Waddell, Myron C.
Denver, CO

Williams, Jarrett
Abilene, TX


Wilson, James R.
Chittenango, NY

Wood, Charles T.
Prospect Park, PA
Ob.-Gyn

For anyone accustomed to Duke Medical Center as it exists today, it would be difficult to believe what the parent institution was like in 1930. At that time, the two original buildings (the medical school and the hospital) were newly landscaped and were surrounded by pine woods on the three sides not facing the quadrangle. The medical complex seemed just like one of the West Campus departments, and closer to the rest of Duke University than it is today.

My guess is that the original faculty consisted of about two dozen people. About half were the young, full professor, department heads who had been "hand-picked" by Dean Davison. We students were lucky to have had most of our lectures given by these exceptional teachers. And, very soon they knew us as students and as individuals. An optimistic and comfortable but also vigorous atmosphere prevailed.

The Anatomy Department was uniquely friendly. Elizabeth Swett, wife of the Department head, Dr. Frank Swett, was like a house mother to the freshman class. She helped full-time to administrate the department, and her troubleshooting for students fitted in naturally.

Being kind to students may have been faculty policy, because they were all good to us. They had parties for us at Christmas, and they invited us to dinner. The latter kind gesture invariably terrified me; my background had been meager, and I was trying to hide it. One dreadful time — my insides shrivel to remember it even fifty years later — we arrived for dinner a day late. My only alibi was that the foreign accent of the lady who had phoned was difficult to understand.

The first freshman class of 1930 was a very mixed bag. Rumor had it that we 50 students had been selected from 500 applicants, and every once in a while, someone wondered out loud, "Why me?" Most of us were in our twenties, but there were at least three teenagers, at least one of whom had finished only two years of college, and one very bright man who must have been somewhere near thirty. We were from many different states and backgrounds, but we had no blacks, no Orientals, and no foreign students among us. Several Jewish students mixed in with everyone else and didn't seem like a minority. The class soon divided into smaller groups of friends, but this did not interfere with the harmony of the group as a whole. We were all oriented toward medical practice, not toward academic medicine; Mr. Duke's wish to provide doctors for the South was then a potent influence. Several students had a hard time keeping up, but no one failed. However, there were soon several dropouts, among them one alcoholic and one of the three women in the class.

The admission of women to the medical school was probably another of the innovative policies of the young Duke medical enterprise. I was originally a graduate student in psychology, and I was sent for a course in physiology. The reaction of the Admissions Committee at Vanderbilt was, "No, go away!" But, my major professor kept sending me back. Finally the committee gave up and put me in the anatomy class taught by Dr. Frank Swett. I was fascinated by the course, and my hard work impressed Dr. Swett. When he moved to Duke as Chairman of the Department of Anatomy, he admitted me to Duke Medical School.

My classmate, Julia Jones, and I did go on to finish medical school and were treated wonderfully well by the faculty. This was in sharp contrast to the behavior of some of the male medical students and house staff, who acted as if they wished we'd get lost, permanently. Unfortunately, this latter attitude was the prevailing one. We were tolerated, usually politely, then avoided if possible. But we became accustomed to the jibes and innuendos. One assistant resident's regular greeting was, "I'm an ultra persimmon to'rd medical women." At faculty parties, my husband's friends kept asking me, "When are you going to quit all this foolishness and settle down?" Our predicament is hard to believe considering how things are today. Such difficulties were not the only ones we encountered. When I applied for an internship, the Professor of Medicine declared, "No women and no married students will be accepted." But Dr. David Smith, Professor of Bacteriology, managed to get me accepted anyway.

Considering the unfavorable climate, why and how did we do it? I don't know the answer for Julia Jones, now deceased, except that she was affluent, assured, very bright and not a "man's type woman". Chance, good luck, and a tolerant husband took care of me.

For several decades, I've been seeing wives work to put their husbands through medical school. My husband put me through. What's more, he put up with my being gone and working much of the time. "Let my wife be", he told our skeptical friends. "I'm buying her a gold washboard and she's going to support me in the manner to which I intend to become accustomed." It was luck that my husband got his first post-doctoral job at Duke. But no one, not even he, anticipated my becoming a busy and successful doctor.

My success, and probably the success of many women doctors in those days, was no doubt in part due to World War II. During 1942, half of the male civilian doctors went into military service, and therefore, any doctor was needed in the community. All the patients who had initially regarded me with suspicion or disdain were glad to have me around, and by the end of the war, I was downright popular. Thus chance again had favored me, and patients paid no attention to my being a woman as long as I had a trained mind.

Eleanor B. Easley, M.D. '34

Undergraduate library, ca. 1930

ENTERING CLASS OF 1931

Baker

Boiarshy

Brian

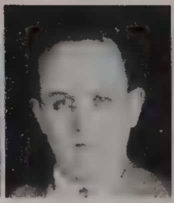
Buirge, Raymond
Brooklyn Park, MN

Cobey, Milton C.
Welcome, MD
Orthopaedic Surg.

Crago, F. Hughes
Great Falls, MT

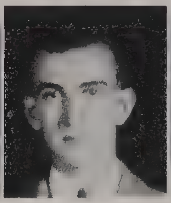
Cree, Maurie B.
Hendersonv'le, NC

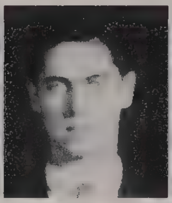
Devine, John W.
Miami, FL
Plastic Surgery


Finch, Alvis D.
Southfield, MI

Fitzgerald, John
Roxboro, NC
General Surgery

Forbes, John S.
Basking Ridge, NJ


Fulp, James F.
Stoneville, NC


Genge

Gorfain, Abner B.
Solvang, CA
Urology

Hare, Robert A.
Beverly Hills, CA

Holtz, Harry M.
West Orange, NJ
Ophthalmology

Jenkins, Raymond
Lehigh Acres, FL

Jones, Julia M.
New York, NY

Joyner, Austin
Branford, CT
Research

Kennon

Leach, C. Edward
Baltimore, MD
Cardiology

Lester, David W.
San Diego, CA
Psychiatry

McLawhorn, B.
Greenville, SC

Miller

Mullen

Munroe

Neumaier, Arthur
Iowa City, IA
Family Practice

Owens, Francis L.
Pinehurst, NC
General Practice

Pachman, Daniel
Chicago, IL
Pediatrics

Preston, John F.
Pebble Beach, CA
Occup. Med.

Pudenz, Robert H.
Paso Robles, CA
Neurosurg. Res.

Query, Richard Z.
Charlotte, NC
Rheumatology

Ralston, Raymond
Slippery Rock, PA
Retired

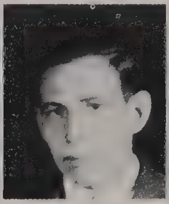
Rasmussen, Lester
Portland, OR
Pediatrics

Robinson, Dennis
Bedford, VA

Robinson

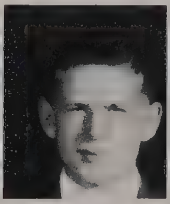
Rucker, Edwin M.
Richmond, VA

Saxe


Scadron

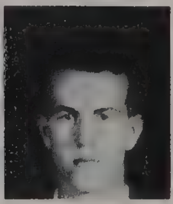
Schmidt, Roland
Eugene, OR

Sharpe

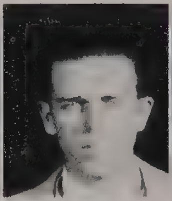

Siegel, Irving M.
New York, NY

Smith, John G.
Rocky Mount, NC
Internal Medicine

Stayer


Stith

Tannenbaum, Jack
Greensboro, NC
Int. Med.-Card.


Wesson, Thomas W.
Tupelo, MS
Ophthalmology

White, Millard B.
Sarasota, FL
Pathology

ALSO GRADUATING WITH THIS CLASS

Jacobs, Julian E.
Myrtle Beach, SC
Orthopaedic Surg.

ENTERING CLASS
OF 1932

Braun, E.M.

Bridgers, Wm. H.
Columbia, SC
Neuro. Surgery

Buckner, F.W.

Burrill, Benjamin
Verona, NJ
Dermatology

Chunn, C.F.

Collins, Charles
White Plains, NY
Int. Med.-Card.

Cortes, Gabriel
Bogota

Costich, Kenneth
Oakbrook, IL
Pathology

Cramer, Charles
New York, NY

Denholm, John S.
Westfield, NJ

Dill, Leslie V.D.
Fort Myers, FL
Ob.-Gyn.

Edwards, J.W.

Fischbach, Max W.
Elkins Park, PA
Internal Medicine

Fox, Herbert J.
Durham, NC

Germer, H.S.

Greenfield, Jack
Marco Island, FL
General Surgery

Harrell, George
Timonium, MD
Med. Ed. Consult.

Harris, Patterson
Southport, CT
Public Health

Jenkins, Arthur
Frenchtown, NJ

Jones, Roderic O.
Sun City Ctr., FL
Public Health

Kavanagh, Wm. P.
Salisbury, NC

Klenner, F.R.
Reidsville, NC

Marion, Donald F.
Miami, FL

Massengill, G.K.
Raleigh, NC
General Surgery

Menefee, Elijah
Green Valley, AZ

Parsons, Philip
Chatham, NJ
X-Ray-Diagnostic

Pishko, Michael
Pinehurst, NC
Ob.-Gyn

Ricketts, Tyson
San Francisco, CA
General Surgery

Schulze, W.

Shields, Ralph K.
Bethlehem, PA
Internal Medicine

Spence, W.T.

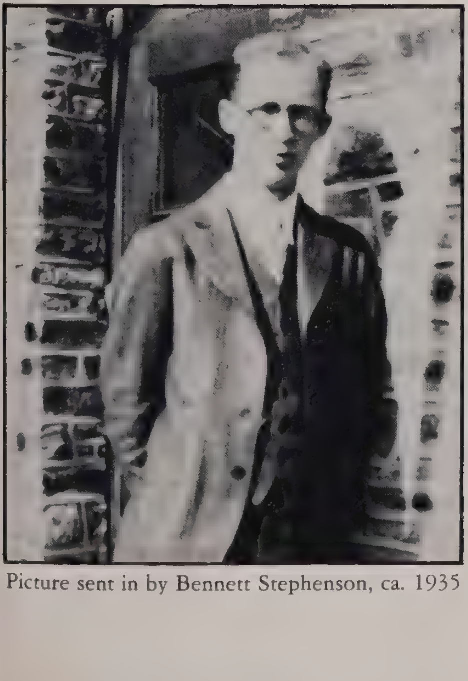
Stevens, Joseph
Greensboro, NC
Internal Medicine

Swingle, Hugh F.
Johnson City, TN
General Surgery

Szanton, V.L.

Thomason, Robert
Corpus Chris., TX
Internal Medicine

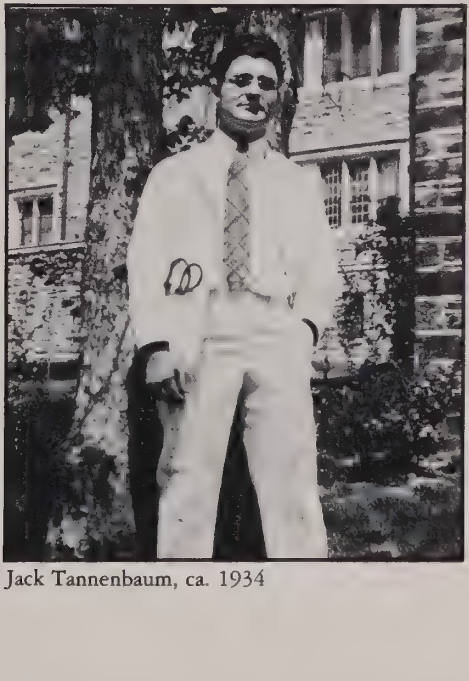
Turner, A. Fred
Orlando, FL
Urology


Picture sent in by Bennett Stephenson, ca. 1935

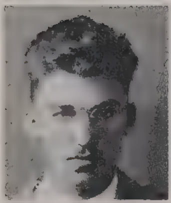
Uhde, George I.
Louisville, KY
Otolaryngology

ALSO
GRADUATING
WITH THIS
CLASS
von Scorebrand
Naha, Okinawa
Public Health

Willis, Candler
Asheville, NC
Fam. Prac.-Surg.


Jack Tannenbaum, ca. 1934

ENTERING CLASS
OF 1933


Adams, Raymond D.
Boston, MA
Neuropath.-Psych.

Adkins, Trogler
Newport I, NC

Alter, Francis W.
San Mateo, CA

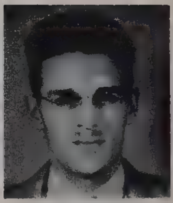
Axelson, Gordon
Spencer, VA

Badanes, Maynard
New York, NY
Internal Medicine

Baylin, George J.
Durham, NC
Radiol.-Otolaryn.

Burge, Julius C.
York, SC

Dein, Harry L.
San Antonio, TX
General Surgery


Drummond, Wm. F.
Shreveport, LA

Fugate

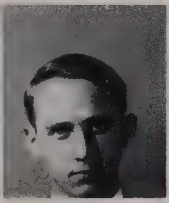
Glass, William H.
West Hartford, CT
Internal Medicine

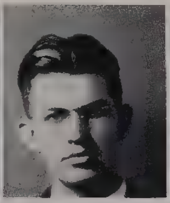
Gose

Gray, Cyrus L.
High Point, NC
Radiology

Haines, Charles
Nashville, TN
Urology

Harvey, Harold I.
Berkeley, CA
Int. Med.-Card.


Henderson, Alfred
Palm Beach, FL
Urology


Herrington, M.S.
Chesapeake, VA

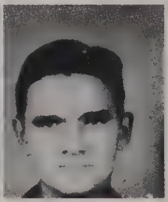
Hornick, Newton
Pittsburgh, PA
Radiology

Kerner, Jeremiah
West Covina, CA
Radiol.-Nuc. Med.

Kinney, Thomas
Durham, NC
Pathology

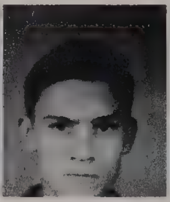
Leff, Wm. Arthur
E. Orange, NJ

Lovell, Durward
Birmingham, AL
Surgery

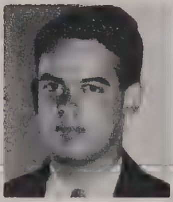

McAllister, Hugh
Lumberton, NC

Marsicano, A.R.
Savannah, GA

Martin, David W.
W. Palm Beach, FL
Pediatrics


Martin, J.R.

Moore, Frank R.
Circleville, OH
General Practice


Morrow, Arch S.
Mandarin, FL
Internal Medicine

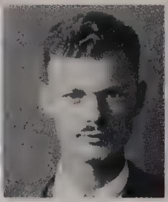
Moseley, Vince
Charleston, SC
Int. Med.-GI

Naumoff, Philip
Charlotte, NC
Family Practice

Newbern, Walter
N. Palm Beach, FL
Card. Surg.-GI

Nitschke, Richard
San Antonio, TX
Internal Medicine

Ould, Carlton L.
Campbell, CA
Radiology


Pate, Archibald
Goldsboro, NC
Alcoholism

Phillips, Wm. A.
Toledo, OH

Postlethwait, R.
Durham, NC
Surgery

Provinsky, Leo B.
Jacksonville, FL

Reed, Howard L.
Centerville, DE

Self

Sheehy, James E.
Syracuse, NY
Ophthalmology

Spring

Stevick, Charles
Hampton, VA
Geriatrics

Street, M. Eugene
Glendon, NC
Family Practice

Van Arsdall, C.
Harrodsburg, KY
General Practice

Whildin, James G.
Bethlehem, PA
Radiology

Wilson, James S.
Durham, NC
General Surgery

Wilson, Wesley W.
Tampa, FL

ENTERING CLASS
OF 1934

Alter, Robert L.

Baer, George J.

Balas, E.M.

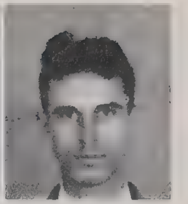
Barefoot, Sherw'd
Greensboro, NC
Dermatology

Berry, Courtlandt
Winter Park, FL

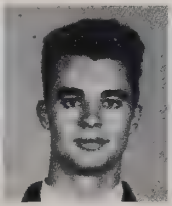
Bessell

Black, John R.
Whiteville, NC
Public Health

Bogardus, George
Bellvue, WA


Brandt, John W.
Pittsburgh, PA
Internal Medicine

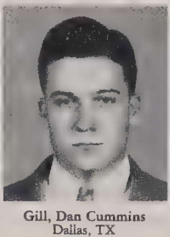
Burns, Margaret
Asheville, NC
Psychiatry


Camalier, Willard
Bethesda, MD

Cross, Almon R.
High Point, NC
Ob.-Gyn.

Duncan, Charles
Radford, VA
General Surgery

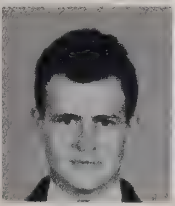
Fogel, David H.
Greenwich, CT


Gill, Dan Cummins
Dallas, TX
General Surgery

Gonder, Thomas A.
Oakland, MD

Haas, William R.
San Diego, CA
Internal Medicine

Hall, C. Fremont
Tarpon Spring, FL
Med. Ophthalmol


Hastings, Walter
Spartanburg, SC
General Surgery

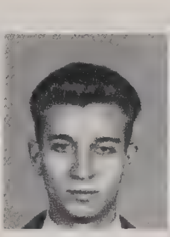
Hickman, Harry S.
Lenoir, VNC
Pediatrics

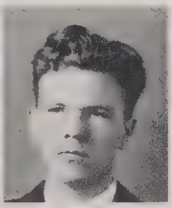
Hollister, Wm. F.
South'n Pines, NC
General Surgery

Horack, Harold M.
New Orleans, LA

Ivie, Joseph McK.
Nashville, TN
Radiology

Joisted, A.H.


Kaufman, Wm. H.
Sparks, MD
Dermatology

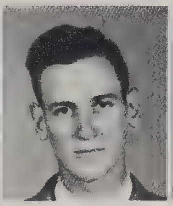

Lee, Albert F.
Mercer Island, WA
Ob.-Gyn.

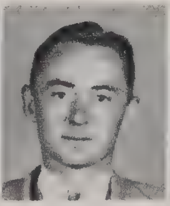
Lee, Lyndon Ed.
Kensington, MD
Surgery

Lesko, Joseph M.
West Redding, CT
Neuro Psychiatry

Lide, Thomas N.
Hilton Head, SC
Pathology

MacColl, Wm. A.
Seattle, WA
Pediatrics


McCracken, Joseph
Durham, NC
Internal Medicine


McNamara, Philip
Greenbrae, CA

Morton, Henry G.
Sarasota, FL
Pediatrics

Peery, James McG.
Cedar Bluff, VA
General Surgery

Perry, R. Mel
Ventura, CA
Pediatrics

Powell, Wm. F.
Asheville, NC
EENT

Ross, Ira S.
S. Orange, NJ
Neuro. and Psych.

Ross, Weldon Troh
McMinnville, OR

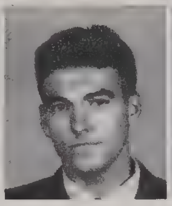
Rumpanos, Socrat
Mobile, AL

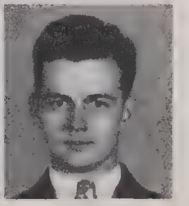
Sachs, James W.
Hagerstown, MD
Ophthalmology

Shinners

Silver, George A.
Durham, NC

Stroud, George M.
Indialantic, FL


Styron, Charles
Raleigh, NC
Int. Med.-Diab.


Thornhill, Hale
Raleigh, NC
EENT

Troxler, Eulyss
Greensboro, NC
Orthopaedic Surg.

Van Hoy, Joe M.
Charlotte, NC
General Surgery

Varner, Philip H.
Chevy Chase, MD
General Practice

Veale, N.C.

Webster

Wells, Warner L.
Chapel Hill, NC

Whitaker, Charles
Clarksville, MD
General Practice

Woolsey, Frank M.
Albany, NY
Internal Medicine

Wyvell, Dorothy
Midland, TX

ALSO GRADUATING WITH THIS CLASS

James Covington
Wadesboro, NC
Internal Medicine

Currens, James H.
Boston, MA

Gill, Atticus J.
Dallas, TX
Pathology

1938 was a very good year for medical students as far as we were concerned. We were a cohesive, hard-working, noncompetitive group with a family-like closeness that developed out of very diverse origins. We had classmates originating from all over the country and from various walks of life. Only four of the students were female, and only four students were married (the only four who could afford it in those economically depressed times, I suspect). Living arrangements were quite heterogeneous; some students rented rooms off campus, a few had apartments, and two of the married couples rented houses. Several of us lived in a four-room shack in the woods where the parking deck is now. During the four years, we lost only three classmates: two who failed out and one who died of a brain tumor. Not many of us became very famous, but there does come to mind A.J. (Jim) Gill, who became a Professor of Pathology and Dean of the Southwestern Medical School in Texas; F.M. Woolsey, who became Dean of the Medical School at Albany in New York; and Warner Wells, who wrote the Hiroshima Diary based on his post-war experiences as part of the atomic bomb survey team living in Japan immediately after the war.

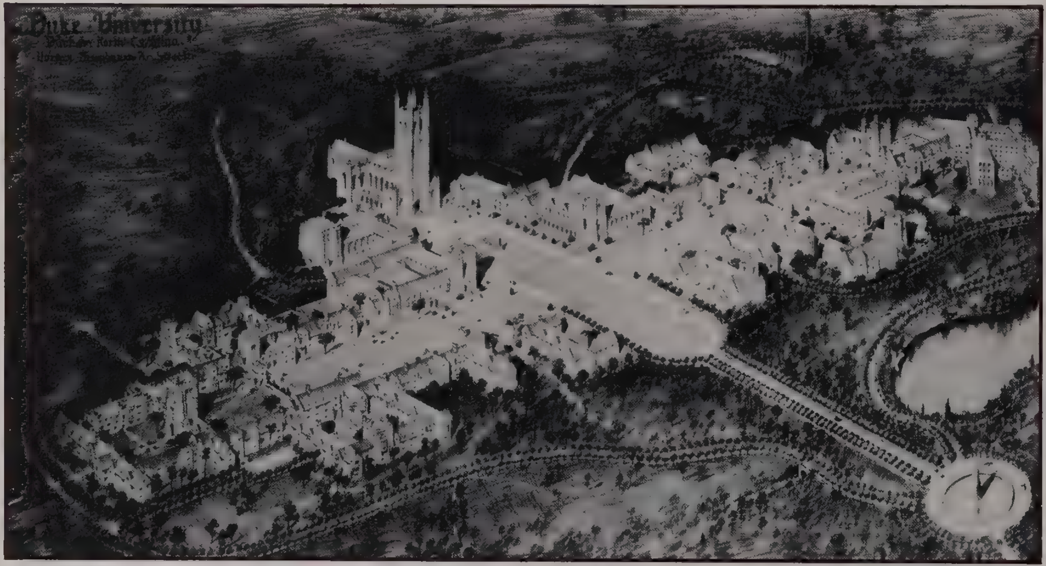
We were the fifth class at Duke and it was still a little Johns Hopkins, inasmuch as most of the faculty had come from that school. Our first real encounter with a faculty person was with Dr. Frank Swett, who was the Professor of Anatomy; not only was he an interesting and warm person, but he was also a very good instructor and very helpful. His wife, though we were not aware of any formal title, was a sort of mother to everybody in the medical school and would probably today have the title of Associate Dean for Student Affairs. She took great interest in every student and remembered each of us for many years after we had gone from "Ivy Halls".

Other faculty members are also well remembered. Dean Davison was a phenomenon and a genius loved and admired by all. Dr. F.M. Hanes, Professor of Medicine, always wrote aphorisms on the blackboard at the start of each of his lectures; many of these were quotations from Hippocrates and other famous physicians or philosophers from the past. I recall one bit of advice he gave us: "A physician should marry a nurse or a wealthy woman; a nurse will understand his problems and a wealthy woman will not care." Dr. Deryl Hart, Professor of Surgery, is recalled with great fondness. In particular, I remember his lectures on jaundice, in which he described in great detail his own battle with the disease; although he called it catarrhal jaundice, I think he must have had hepatitis. Dr. Wiley Forbus, Professor of Pathology, was in the process of writing his book, **Reaction to Injury,** and continually lectured to us on this interpretation of pathology. Dr. Perlzweig, Professor of Biochemistry, had quite an accent. On one occasion, Chuck Whitaker was standing on a laboratory stool pouring an agent into the top of a rather long burette and Dr. "Pearly" asked him, "Young man, vot are you doing up on that stool?" To which Chuck replied, "I am studying higher chemistry!" This rather incensed "Pearly", but he didn't throw Chuck out of the class. One time in physiology class, we were studying the effects of dilute alcohol on gastric contents, and each of us involved in the experiment had a Levine tube passed into his stomach; after this, samples of gastric juice were aspirated to measure hydrochloric acid. One classmate who was a complete teetotaler was, unannounced to him, provided with 70% alcohol and became a bit tipsy. Last but not least, all of us recall Dr. Jay Arena, at first as a pediatrics resident, and later as an instructor in pediatrics. We still look forward to seeing him when we return to annual reunions.

On the lighter side, our class was the first one to have an annual student drama portraying the faculty. Among the heroes of the drama were Dr. Sterile Part with his magic ultraviolet wand which could cure anything, and Dr. Julio Ruffian who used a bamboo stick for a proctoscope. There were many other interesting characterizations, and as I recall, only one of our faculty members was insulted by his protrayal. The big social event of the year was an annual student-faculty dance held at the then existing and famous Washington Duke Hotel in downtown Durham; in general the faculty became more "crocked" than did the students.

1938, as you will recall, was the last year of world peace, but we could see the clouds forming. We left our beloved Duke with mixed emotions, something like leaving home and mother to go out into the cold cruel world, but going eagerly to try out our newly found knowledge in the world of internship and practice.

J.M. Van Hoy, M.D. '38



Artist's conception of West Campus, 1930's

Stan Lourdeaux and Buck, 1938

ENTERING CLASS OF 1935

Adams, F.M.

Biddle, Robert M.
L'tle Hocking, OH
Internal Medicine

Brown, W.E.

Bunch, C. Pardue
Artesia, NM
Family Practice

Burk, James M.
Decatur, IN

Carmichael, G.G.

Cayer, David
Winston-Salem, NC
Gastroenterology

Cox, John Hulon
Tobaccoville, NC

Crosby, Frank H.
Lockport, NY

Douglas, John M.
Charlotte, NC
Internal Medicine

Downing, Robert
Kennebunk, ME

Dunlap, Ernest B.
Manchester, GA
Orthopaedic Surg.

Eagles, Archie Y.
Ahoskie, NC

Eckbert, Wm. Fox
Gastonia, NC
Family Practice

Field, Arnold L.
Baltimore, MD
Gyn.-Gen. Surg.

Haymond, W.V.

Kernodle, Harold
Burlington, NC
Surgery

Kornegay, Robert
Rocky Mount, NC

Larsen, Charles
Lakeland, FL

Latchem, Charles
Des Moines, IA

Lawrence, J.

Lincicome, Robert
Vienna, WV
Anesthesiology

Lucas, Paul W.
Tifton, GA
E.E.N.T.

Mattocks, T.R.
Satellite Bch, FL

McAnally, Wm. J.
High Point, NC
Ob. Gen. Prac.

Merkley, Harold
Salt Lake Cty, UT
Ob.-Gyn

Meyer, Francis P.

Moffit, O.P.

Morrow, Rufus C.
Banner Elk, NC
Otolaryngology

Moser, L.A.

Munroe, Colin A.
Hollywood, FL
Int. Med.-Card.

Munson, Henry T.E.
St. Clair Sh., MI
Otolaryngology

Nalle, Brodie C.
Shreveport, LA

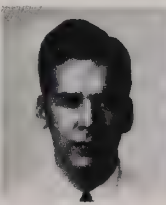
Newman, Glenn C.
Clinton, NC

Nickau, Robert H.
Tequesta, FL
Radiology

Nixon, Pat I.
San Antonio, TX

Palen, Gilbert M.
Margaretville, NY
Retired

Parrish, Albert
Ft. Lauderdale, FL
Urology


Pyle, Lawrence A.
Bethesda, MD
Retired

Raper, James S.
Asheville, NC
Radiology

Rysanek, Wm. J.
Baltimore, MD

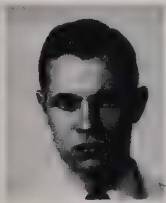
Sawyer, L.E.

Schanher, Paul W.
Springfield, OH
Surgery

Schnoor, Thomas
Santa Cruz, CA
Opthalmology

Smith, Cathcart
Conway, SC
Internal Medicine

Stark, Sidney
Brooklyn, NY


Storey, Wray D.
Odessa, TX
Pathology

Surles, D.L.

Thetford, Joseph
Hueytown, AL

Timmons, John R.
Columbia, SC
General Surgery

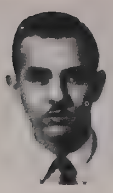
Trachtenberg, Wm.
Goldsboro, NC
Emergency Med.

Turner, Larry
Durham, NC

Wadsworth, Joseph
Durham, NC
Ophthalmology

Walp, Frederic M.
Pottstown, PA
Retired

Watson, George A.
Durham, NC



Webb, R.C.

Weeks, Kenneth D.
Rocky Mount, NC
Internal Medicine

Wexler, Irving B.
New York, NY
Pediatrics

Wilson, Reaves A.
Sarasota, FL

Wren, James C.
Eden, NC
Internal Medicine

When the class of 1939, fifty-eight strong, gathered at Duke in September, 1935, it was only the fifth year of existence of the medical school. Only three classes had graduated before we arrived. Every region of the United States was represented in our class; there was only one girl, Doris Surles from Dunn, North Carolina, and there were no blacks or other minority students, or at least there were no students who were recognized as such back in those days. Five of us, all natives of North Carolina, were close friends, S.A.E.'s and graduates of Davidson College. We were: John Douglas, an actively practicing internist in Charlotte, North Carolina; Bob Kornegay, now in the active practice of surgery in Rocky Mount, North Carolina; Colin Monroe, an active internist in Hollywood, Florida; Joe Wadsworth, recently retired Chief of the Duke Eye Center; and myself, K.D. Weeks, currently in the active practice of internal medicine in Rocky Mount, North Carolina. Little did we know then that we would receive early and not too flattering recognition in the subject of biochemistry before the end of the first school year.

Most of us roomed in the graduate dormitory on the West Campus the first year. Only three or four students in our class were married and an even smaller number had automobiles. The "Duke world" for the majority of the class, at least for the first year, fairly quickly settled down to include the graduate dormitory; the dining room, the post office, the "dope shop", the Duke Store, the barber shop and the laundry — all in the Men's Union on West Campus; and the fourth floor of the Davidson Building, where the Department of Anatomy and the cadavers were located. Dr. Frank Swett was Professor and Chairman of the Department of Anatomy; assisting him were Professors Hetherington, Hollingsworth, and Everett, and Instructors Finkelstein and Baylin. Other courses of that first semester were histology and neuroanatomy, which was taught by Dr. Tal Peele.

This first semester proved to be one of the most pleasant experiences of our medical school career. The atmosphere was relaxed and easy-going, and there was no feeling of pressure on anyone; there were no assignments and we had a choice of textbooks. Taking the place of written examinations were conferences of small groups of students with various professors at weekly intervals. There was no "spoon-feeding", but we soon found out that we had to do a lot of reading and studying in the library. I will never forget Mrs. Farrar, the librarian, and her aged mother who was always with her. The library was also a good place to read the paper, take a nap, or make a date with one of the student nurses.

Unpredictably, Dr. Swett would call one of us into his office for a very frank discussion of our academic standing and our prospects for the future. In one of his conferences with me, he said, "All men (students) are not created free and equal, free maybe, but not equal. Some are brighter than others and learn faster, while others are basically just as sound or smart, but are plodders and climb the ladder of success slowly." I never did know exactly what he meant by all of this, but it made quite an impression upon me that I have never forgotten. Mrs. Swett also had an office on the fourth floor and made it a point to know every student well. She was truly the students' advocate and was frequently called upon to hear our problems. She was subsequently given an office on the first floor near the Dean's office. In reality, Mrs. Swett worked closely with the Admissions Committee, although, as far as I know, she was never so designated officially. There are still many who, to this day, feel that Mrs. Swett was most persuasive with the faculty and was very influential in the final deliberations of the Admissions Committee.

A popular diversion from the daily routine was to listen to the music of Johnny Long and Les Brown, live in the lobby of the Men's Union, either before or after eating supper. Additional social activities, "after hours" and on weekends, included such names and places as the Tavern at the Washington Duke Hotel, Pete Rinaldi's Restaurant (which started out as a very small lunch counter right across the street from McPherson's Hospital), the Village Inn, and Crickmore's Tavern on Saturday nights ("the music goes down and around and comes out here", and "Marie, the dawn is breaking").

First semester it seemed medical school wasn't so tough after all, but with the beginning of the second semester came biochemistry with Dr. Perlzweig and physiology with Dr. Eadie. Those of us from Davidson knew that we were poorly prepared for biochemistry, and sure enough, not many days had passed when Dr. Perlzweig declared, "You Davidson boys are the dumbest I have ever seen in this school!" Furthermore, he singled me out one day while I was boiling water in the lab and said, "Mr. Veeks, you are in a sinking boat and can't svim." (He had a little trouble pronouncing W's). That night before supper I had my trunk packed and was leaving on the 9 o'clock bus for Rocky Mount, but fortunately I called Mrs. Swett to tell her that I had flunked out of medical school and was going home. She reminded me that I had done very well in anatomy, and asked me to come to see her the first thing next morning. When I arrived in her office at 8:30 a.m., she had already talked with Dr. Perlzweig, who had agreed to give me another chance to prove that I really wasn't as dumb as I appeared to be. In retrospect, I am sure the remarks by Dr. Swett that "all men are not created free and equal" and the encouragement by Mrs. Swett gave me the necessary confidence and motivation to finish medical school, but the remarks and influence of Dr. Perlzweig kept me from becoming another Osler. To this day, I still have bad dreams about pH and acid-base balance — nightmares in which I find myself in a sinking boat and still cannot swim.

Then came September 1936 and the second year of medical school for the Class of 1939. After biochemistry and physiology (I became an expert at boiling water and smoking drums), we were ready for anything. This was the year for pathology, clinical microscopy, hematology and physical diagnosis; and it was also our first introduction to Wiley Forbus, Oscar Hansen-Pruss, and Ed Orgain. This was the year that it all began to fall into place for the first time. We were issued a little black bag with stethoscope, blood pressure apparatus, tuning fork and reflex hammer, and there was no holding us back now. Dr. Forbus was hot on inflammation and reaction to injury, and Dr. Hansen-Pruss's slogan was, "Blood will tell." They were truly great teachers.

Then came the clinical years, the junior and senior years, the best years, and working with patients on the wards for the first time. We didn't have penicillin or cortisone, but we had the priceless opportunity of being taught "the state of the art" as it existed at that time by such superstars as the following: Dr. Deryl Hart, Chief of Surgery — ultraviolet lights in the operating rooms and tidal drainage of thoracic empyema; Dr. Fred Haynes, Chief of Medicine — he said, "Blood means cancer until proven otherwise" exactly 5000 times during my career at Duke but it is still true; Dr. "Cal" Callaway — Medicine "S" Clinic every Thursday night, the social occasion of the week, with Darkfields, Wassermanns and Kahns, and with injections of Neoarsephenamine and Bismuth — "Keep a high index of suspicion; you can catch it on the avenue as well as in the alley"; Dr. Julian Ruffin, Director of the Medical OPC — who could ever forget fast rounds in the MOPC with Dr. Ruffin, the master of taking short histories and making quick, accurate diagnoses; Dr. Wiley Forbus — inflamation and reaction to injury; Dr. Oscar Hansen-Pruss — unsurpassed in hematology, one of the great teachers of all times and at his best when squared off with Wiley Forbus in a Saturday morning CPC in the amphitheater; and Dr. Walter Kempner — just arriving on the scene with his Warburg apparatus and a bag of rice. Dr. Kempner learned English for the first time from the students he was assigned to teach. I can still see and hear him with his stethoscope in place, telling a patient to "breeze in and breeze out". Others making lasting impressions on all the students they taught were Ed Orgain, Clarence "Clonnie" Gardner, Lige Menefee, Bayard "Nick" Carter, and Bill "Nick" Nicholson. Of course, such a list could never be complete without including Dean Davison and "his man", Carl, and the Dean's First Lieutenant, Jay Arena. Carl kept the Dean well supplied with memorandums, books and journals while the Dean sat on his throne in the john across from his office. It is probably a true statement that much of the destiny of Duke Medical School was shaped as a result of the Dean's deliberations in the john.

At the same time, extracurricular activities and events were not being neglected. As we gained more confidence with the approach of our senior year and the anticipation of our M.D. degrees, we also found more time for outside interests.

The university was faced with a shortage of dormitory space for graduate students and consequently built three "cabins". Each cabin housed twelve medical students and was located in a wooded area just behind what is now Hanes House. These "cabins" proved to be very popular as the hub of Saturday night social activities and were just a short walk from Baker House, the nurses' home. At that time, popular brands of drink (except on Sunday mornings) were Queen Mary "pinch bottle", Scotch, Crab Orchard and Mint Springs.

"Hoover Carts" were disappearing from the streets, and with help from President Franklin D. Roosevelt, the NRA, the WPA, and the CCC, the general economy was showing signs of recovery from the great Depression of 1929 and the early 1930's, but most medical students and their parents were still hard up. Very few students had automobiles or were married. There were no black students or other minority students as stated earlier, but a few foreign graduates were joining the house staff through the influence of Dean Davison. A private room in Duke Hospital cost $8.00 a day and a private duty nurse got $4.50 for an 8-hour shift. Desegregation was unheard of; Long, Osler, McDowell and Welch Wards were for whites, and Nott and Prevost were segregated for blacks. Hospital Care of Durham and Hospital Savings of Chapel Hill were just getting underway as the first pre-paid hospital insurance companies in the United States; in later years (1968), these merged to become Blue Cross and Blue Shield of North Carolina. Joe Louis was boxing champion world. Television had not arrived and H.G. Wells scared everybody to death with his radio dramatization of Invasion from Mars. Wallace Wade was football coach at Duke and Ace Parker, Eric Tipton, Jack Crawford and George McAfee were All-Americans. Duke knocked Carolina out of a Rose Bowl bid in 1935 with a 25-0 upset, beat Pitt 7-0 in the snow in 1937, but lost in the Rose Bowl at Pasadena in 1938.

When graduation rolled around in June of 1939, Duke was making steady progress but still struggling for recognition, prestige and acceptance within the medical profession, not only regionally and state-wide, but also locally. Wake Forest and Carolina still had two-year medical schools. Governor Hoey made the commencement address for our graduation exercises in Wallace Wade Stadium. It was a beautiful Sunday afternoon and no one knew that World War II was just two years down the road.

Forty years later, I can still hear the words of Dr. Perlzweig. "You Davidson boys are the dumbest students we have ever had in this medical school." I have also remembered with great redeeming satisfaction that of the five students that made A.O.A. that year, four of them were those "dumb Davidson boys".

K.D. Weeks, M.D. '39

Dave Goddard at bat, ca. 1940

East Campus, 1930's

ENTERING CLASS OF 1936

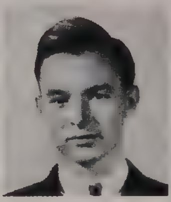
Anderson, Norman

Andrews, V.L.

Andrus, F.H.

Badgley, Waldo O.
Lansing, MI
Orthopaedic Surg.

Baeder, Fred N.


Bateman, Jerome
Buffalo, NY

Bonser, Wm. H.
Toledo, OH

Brown, Ivan W.
Lakeland, FL

Brown, R.
Beatrice, NE

Brumbach, Wm. K.
Gaffney, SC

Campbell, Robert
Hagerstown, MD
General Practice

Chambliss, S.

Collins, Curtis
Jacksonville, FL
General Surgery

Conforti, V.

Etter, Harry S.
Chevy Chase, MD
Military Medicine

Finner, Richard
San Bernard., CA
Neuro, and Psych.

Fisher, W.H.

Ford, Joseph B.
Fresno, CA
Thoracic Surgery

Fulmer, Wm. H.
Savannah, GA

Fulton, J.O.

Gibbons, J.J.

Ginn, Stephen A.
Gastonia, NC
Pediatric Psych.

Goddard, David W.
Daytona Beach, FL
Urology

Haines, Risley F.
Armo, SC
Gen. Surgery

Harris, Willis W.
Bradenton, FL

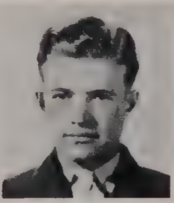
Harshman, Leroy
Redington Sh., FL
General Practice

Hawes, C.J.

Hawkins, William
Dallas, TX
Pediatrics

Hiatt, Joseph S.
South'n Pines, NC
Int. Med.-Pul.

Johnson, Rolf E.
Nazareth, PA


Kelley, James W.
Topeka, KS
Plastic Surgery

Kostant, George
So. Orange, NJ
Dermatology

Kuhn, Harold H.
Big Pine Key, FL
Orthopaedic Surg.

Laperal, T.

Lewis, J.H.

Lourdeaux, S.J.
Los Altos, CA

Stan Lourdeaux at bat with Dr. Carter catching, ca. 1940

Class of 1940

Staff vs. 4th year class of 1940

Staff vs. 4th year class of 1940

Maness, Paul F.
Burlington, NC
Pediatrics

Margolis, George
Lyme Center, NH
Path.-Neuropath.

Margolis, Lester
Hillsborough, CA
Neuro. and Psych.

McPharlin, M.G.

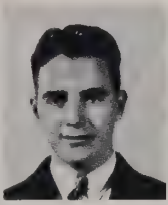
Miller, R.P.

Mills, Wardell H.
Greensboro, NC
Ophthalmology

Moss, J.E.

Motley, E.R.

Nisbet, D.S.


Nixon, R.R.

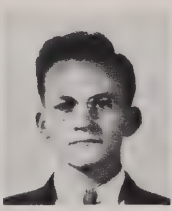
Paquet, Joseph F.
Portland, OR
Internal Medicine

Poole, Pierre P.
Brownsville, TX
Cardiovasc. Ds.

Roberts, Winston
Hilton Head, SC
Ophthalmology

Rutherford, R.T.
Rockville, MD

Saleeby, D.N.

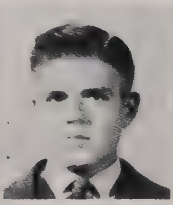

Sapp, Clarence J.
Rome, GA

Shields, Richard
Philadelphia, PA

Thornhill, Patti
Raleigh, NC

Simpson, Paul E.
Clarksville, VA
Ob.-Gyn.

Sotirion, George
Springfield, MA


Speir, Ross C.
Guntersville, AL

Spence, W.C.

Steiger, Howard
Charlotte, NC
Dermatology

Taylor, Harvey G.
Houston, TX

Tullis, James L.
Newton, MA
Int. Med.-Hem.

Tupper, James A.
Edmonds, WA

Venning, Wm. L.
Boise, ID
General Allergy

ALSO GRADUATING
WITH THIS CLASS

Bassell, Arthur
Baldwin, NY
Urology

Goodman, E.G.
Leland, NC

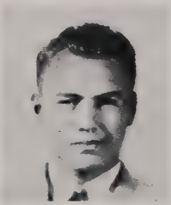
Hawfield, Harold
Chevy Chase, MD
Surgery

Walsh, R.E.

Welch, Jack H.
Encino, CA
Internal Medicine

Weyant, W.A.

Whitaker, Richard
Charleston, SC


Whitley, Robert
Rocky Mount, NC
Internal Medicine

Wood, Robert Cary
Pasadena, CA
Surgical Oncology

Woodruff, Wm. E.
Napa, CA

ALSO GRADUATING
WITH THIS CLASS

Ramsbottom, John
Myrtle Beach, SC
Family-Gne. Prac

Riggs, Millard M.
Morganton, NC

Rundles, R. Wayne
Durham, NC
Hem.-Onc.

Wall, George
Albemarle, NC

ENTERING CLASS OF 1937

Adams, Ellis W.
Boynton Beach, FL
Pediatrics

Ames, Richard H.
Greensboro, NC
Neur. Surgery

Anderson, E.D.

Babcock, Kenward
Amherst, NY
Urology

Barnes, Gareth B.
New Canaan, CT

Baum, Ralph E.
Durham, NC

Bednarz, S.I.

Benbow, Edward P.
Greensboro, NC
Pediatrics

Beyer, Emil C.
Morehead City, NC

Brown, Edwin W.
W. Palm Beach, FL
Urology

Brown, J.W., Jr.
Concord, NC

Brown, K.B.

Burgess, Woodrow
Davis, CA

David, Joseph K.
Jacksonville, FL
Pediatrics

Donaldson, Harold
McCook, NE
Gen. & Rect. Sur.

Elliott, Fred D.
Reno, NV
Internal Medicine

Emmett, J.E.

Exum, W. Allen
Kingsport, TN

Forth, Paul T.
Roanoke, VA

Gilliam, J.S.

Grant, Henry B.
Rocky Mount, NC
Pediatrics

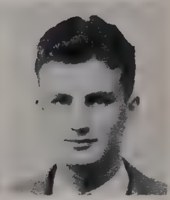
Guerin, B.B.

Haywood, Hubert
Raleigh, NC
Ophthalmology

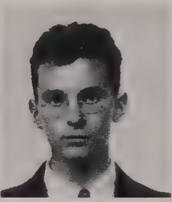
Hirst, Donald V.
Council Blufs, IA
Ob.-Gyn.

Hock, Charles W.
Augusta, GA

Hodges, J.W.


Horsley, Wm. N.
Belmont, NC
Family Practice

Irving, Richard
Hendersonv'le, NC
Anesthesiology


Karansky, Stanley
Kailua, HI
General Medicine

Karmany, Wm. H.
San Angelo, TX

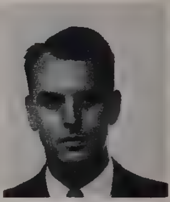
Kintzing, Wm. B.
Westbury, NY
Emergency Med.

Kiser, Glenn A.
Blowing Rock, NC
Retired (1955)

Mann, Frank R.
McRae, GA
General Practice

Martin, Archibald
Harlingen, TX
Radiology

McCulloch, Rudolph
Springfield, OH


McFadyen, Oscar L.
Fayetteville, NC
Internal Medicine

Student-Faculty Picnic: B. Carter, E. Easley, W. Eagle, ca. 1941

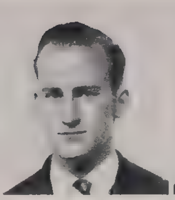
W. Karmany, K. Brown, M. Rindge and the piglet, ca. 1941

Messer, Addison L.
St. P'burg, FL

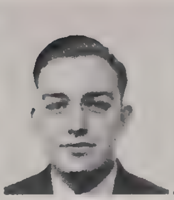
Meyers, Muriel C.
Ann Arbor, MI
Int. Med.-Hem.

Mims, Leon H., Jr.
Coral Gables, FL
Orthopaedic Surg.

Mulford, Edwin H.
Southport, CT
Neur. Surgery


Muse, J.P.

Neill, R.G.


Newman, O.M.

Perryman, Olin C.
Winston-Salem, NC
Family Practice

Pfeffer, Arnold
New York, NY
Psychiatry

Podger, Kenneth
Durham, NC

Quillian, M.P.
Bradenton, FL

Riley, W.J.

Rindge, Mila E.
Madison, CT
Preventive Med.

Savage, E.D.

Scott, John G.
Reno, NV

Sellers, Wm. H.
Anniston, AL

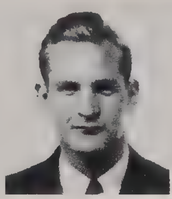
Smart, G. Ford
Asheville, NC
Ophth.-Otolaryn

Snedegar, Paul D.
Elkins, WV

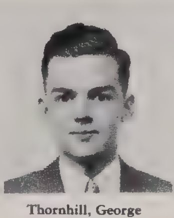
Stack, David R.
Spartanburg, SC

Stauffer, Charles
Jackson, TN
Urology

Stenhouse, Gordon
Jekyll Island, GA
Ob.-Gyn.


Taliaferro, Rich.
Ada, OK

Thompson, Wm. G.
Red Hook, NY
Emergency Room


Thornhill, George
Raleigh, NC
Ophthalmology

Thornhill, R.P.

Timberlake, Lloyd
Atlanta, GA
Internal Medicine

Timmons, James M.
Columbia, SC
Otolaryngology

Trout, Philip C.
Roanoke, VA
Orthopaedic Surg.

Weekes, D.J.

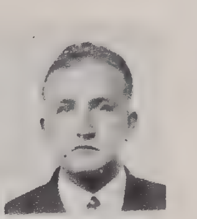
Widmark, W.L.

ALSO
GRADUATING
WITH THIS
CLASS

Clay, C. Stafford
Huntington, WV
General Surgery

Wills, T.W.

Willson, Prentiss
Guadalajara, Mex.


Winstead, George
Franklin, NC

L. Mims, R. Irving, A. Exum, R. Neill, ca. 1941

ANY SIMILARITY TO ANY PERSON
OR PERSONS LIVING OR DEAD.
LITERALLY OR FIGURATIVELY
IS ENTIRELY PREMEDITATED!
PLA
K. Podger, P. Willson, A. Pfeffer, O. McFadyen, D. Weekes, ca 1941

In September of 1938, eighty students comprising the 8th class of Duke University School of Medicine assembled for the first time. We were to be the Class of '42. Most of us had never been exposed to the grandeur of such a school which was sequestered in the pine forests of North Carolina.

This citadel of fine Gothic architecture, erected with native stone, surrounded by peaceful walkways and formal gardens, was dominated by a magnificient chapel and tower. To walk into the entrance of the medical school was like walking into the childhood haunts of Queen Elizabeth at Hampton Court.

Ours were mixed feelings of awe, apprehension, zeal, fear, anticipation, wonder, and pleasure, but here had been created the most idyllic atmosphere for study imaginable.

The bloodless annexation of Austria by Nazi Germany at this time aroused no thoughts of our future involvement in a world conflict that would engulf us all. This war would take away our first classmate, with others to follow.

Our first meeting together demolished the old medial axiom, "Look to your right, now look to your left — one of you will be absent from next year's class." Instead, we were comforted by being told that we had been accepted as students because the school had faith in our ability to succeed. This attitude amongst the faculty never changed and assured us that no matter what the difference in levels of intelligence, all of us had a chance to become physicians if we were diligent.

We learned all about women's liberation before it was a household word. Two of our classmates were girls who were scholastically brilliant and esteemed by their male colleagues. They were vigorous competitors who sought no favors because of their sex.

Anatomy occupied most of our time in the first year. Memories of the anatomy rooms bring to mind many chuckles. There were four students to a cadaver. Each cadaver was appropriately named. One lad was named "Cock Robin" for one obvious anatomic reason, the other reason being that he had been stabbed to death by an unknown assailant. "Bathsheeba" had accidentally been electrocuted in a shower, "Lou (leutic) Salversan" had died of syphilis, "Long John Silver" had a leg amputated, and so on . . .

Over our dissecting table was a four-bladed electric fan. Each blade was numbered 1 to 4 with white chalk. About 10 o'clock each morning, the fan would be activated momentarily and then the current would be shut off. When the fan stopped, the numbered blade which rested at the bottom of the fan would indicate which one of us had to go to the "Dope Shop" and buy cokes for the other three that day. This betting was brought to an abrupt halt one day when Dr. Swett chanced to hear our cheers as the fan slowed to one of its stops.

It was an eerie feeling whilst sitting amongst the cadavers if you happened to be dissecting along up in the lab at night. It was akin to the sensation of viewing your first autopsy when you felt that the most perfect machine ever created was quickly being dispatched by the pathologist's knife.

How we smelled in those days! Our hands and forearms were saturated with formaldehyde, a scent that defied soap and water. What delight we had at mealtime, eating in the Union where we mingled amongst the undergraduate students at the dining tables, augmenting our smell with the sordid and exaggerated tales of the dissecting room. One by one, they would pick up their trays to sit elsewhere, or in some cases, give up eating altogether.

One group of about ten medical students lived in the subbasement of the hospital for the exorbitant rent of about $10.00 per month. The double decker beds lay very close to the overlying steam pipes. There was no privacy. When 24-hour urine samples were collected, there were many opportunities to contaminate the large collecting bottles. After-shave lotion had never been discovered in the pure form in urine before — The Aqua Velva Syndrome. It was also odd to find lactose in the urine of a non-lactating male. Glucose sprinkled here and there made all of them diabetics.

In biochemistry, one classmate quickly acquired the nickname "Smokey". He and his Bunsen burner were hazards as demonstrated by the fact that he managed to start three fires in one week. He was one of those whose urine, when tested, contained sugar. Knowing his urine had been tampered with, he stepped out of the lab to obtain a fresh specimen. In the meantime, an evil student added glucose to his bottle of Benedict's solution. Needless to say, he blanched considerably when the next test was also positive. One day we tested the effect of alcohol on gastric secretion, and after swallowing a naso-gastric tube, Smokey was given a whopping dose of alcohol through the tube; he was politely dismissed by the professor when he became "stoned" about one half-hour later.

No one can forget the communications from Sailor, Dr. Hetherington's cat. The cat corrected all of our papers in neuroanatomy and made scathing, sarcastic comments when mistakes or omissions were made, but no one dared to malign that feline impostor.

Mrs. Swett was our social director and she was also our mother away from home. She would not hesitate to put her stamp of approval or disapproval on the dates we escorted to the medical school dances, and she also enjoyed entertaining us students in her home. We all loved her.

There was much hard work. Any medical student will testify to that. When the library closed at midnight, there was still an hour or two back in the room before the books were closed. The routine was interrupted by such activities in the university as the campus movies, the yearly visit of Eugene Ormandy and the Philadelphia Orchestra, a ballet, a play, and others.

The medical school and the university did much to provide work for the students who needed financial help, and the Duke University student loan program provided assistance without which many students could not have completed their studies. In those days, a full summer vacation of hard work and frugal living provided a student with $250.00 in savings.

The faculty was largely drawn from and motivated by the precepts and philosophy of the Johns Hopkins School of Medicine. Never could there be a finer group of men dedicated to the art of medicine. We revere them now as we did then. I was proud to be a graduate of the Duke University School of Medicine, and the success I enjoy today, modest though it is, I owe to these disciples of Osler, Halsted, and others. My class shares this sentiment.

I have one final anecdote. On a Sunday morning, December 7, 1941, when we were fourth year medical students, we were shaken by the radio reports of the disaster wrought by the sneak attack on Pearl Harbor. On the following morning, we huddled around a small radio in the Dope Shop and heard Franklin Roosevelt declare war on Germany and Japan and utter those famous words about a day of infamy. Within one month, every member of our class had signed a commitment to join one or the other of our armed forces in service of our country. Truly, this was an act that exemplified the spirit in the Class of '42.

Finally, what is so rare as a day in June — especially the radiant Sabbath morning in June of 1942, when the busy sounds of the university were hushed and we realized that four years had finally brought us to a few days of graduation ceremonies. The carillon's notes pealed out over the campus and the pine forest beyond with the strains of "America". This was one of the most poignant memories of my life. "God shed her grace on thee, And crowned thy good with brotherhood, From sea to shining sea." These words of the author of "America" apply equally as well to our Alma Mater as to the Class of '42.

Earl A. O'Neill, M.D. '42

ENTERING CLASS OF 1938

Baldwin, Wm. E.
New Ellenton, SC
Occup. Medicine

Black B.

Bremer, Albert H.
Akron, OH

Brindley, C.O.

Brownell, Iverson
Greenville, SC

Bryant, Walter E.
Hemingway, SC

Buchwald, Merwin
Ft. L'dale, FL
Family Practice

Burch, George Wm.
Tyler, TX
Ophthalmology

Butler, Clarence
Columbus, GA
Internal Medicine

Clark, John R.
Martinsville, VA
Urology

Cutchin, Joseph
Sherrills F'd, NC
General Practice

Daniel, Roy David
Sylva, NC

Dinsmore, Arthur
Hollywood, CA
Internal Medicine

Eakins, H.W.

Edwards, H.P.

Egan, J.R.

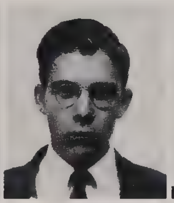
Fearing, John M.
Chevy Chase, MD
Psychiatry

Flower, Arthur H.
Burlington, VT
Dermatology

Ford, Joseph A.
C'land H'ghts, OH

Gale, Elmer T.
Narragansett, RI
Chronic Diseases

Harris, J. Frank
Atlanta, GA
Internal Medicine


Hege, J. Roy, Jr.
Hollywood, FL

Hooper, A.W.

Horne, S. Frank
Rocky Mount, NC
Dermatology

Johnston, Frank
Winston-Salem, NC
Card. Surgery

Kerman, Herbert
Daytona Beach, FL
Radiology

Kernodle, Charles
Burlington, NC
Gen. Surgery

Kincaid, J.F.

Koop, C.S.

Ledesma, F.R.

Lentz, Julian C.
Fayetteville, NC
Internal Medicine

Littler, J. Wm.
New York, NY

McLain, Campbell
Hilton Head, SC
Emergency Room

McLean, I.W.
Gross Pt. Sh., MI

Mees, Theo H.
Lumberton, NC

Moise, Davis D.
Sumter, SC

Moran, Frank T.
Auburn, NY
Radiology

Nesbitt, Wm. R.
Fairfield, CA
E. Med. & F. Prac.

O'Neill, Earl A.
Plainfield, NJ
Thor. & Gen. Sur.

Reid, Charles H.
Winston-Salem, NC

Reimer, Frank N.
Patterson, CA

Reinhardt, James
Greensboro, NC
Radiology

Ricketson, Greer
Nashville, TN

Roberts, Luther
Columbus, GA
Surg. & Med.

Rogers, J. Forbes
Darien, CT
General Surgery

Rogers, Max P.
Washington, DC
Industrial Med.

McLean, Brita
Gross Pt. Sh. MI
Occup. Med.

Smith, William C.
Waynesboro, VA
Pediatrics

Snipes, Rochard
Fayetteville, NC

Snyder, G.P., Jr.

Starke, Helen
Omaha, NE
Adult Cardiology

Stone, J.T.

Stone, W. Conrad
Roanoke, VA
Ophthalmology

Street, John M.
New Milford, CT
Family Practice

Sutherland, A.R.
Surry, VA
General Practice

Sutherland, G'rge
Big Stone Gap, VA
General Practice

Templeton, R.G.

Thomas, Andrew
Manchester, CT

Thurston, Harold
Watertown, NY
Anesthesia

Valk, Henry L.
Winston-Salem, NC
Internal Medicine

Vandegrift, H.
Columbia, MD
Admin. Med.

von Glahn, H.D.

Waller, Louis C.
Dunmore, PA

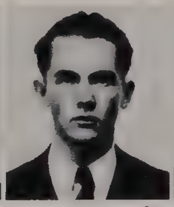
Weeks, Theodore
Bonita Spring, FL
General Practice

Whitt, W.F., Jr.

Winthrup, Charles
Dalton, GA

ALSO
GRADUATING
WITH THIS
CLASS
Kernodle, John R.
Burlington, NC
Ob.-Gyn.

Wortman, Harry C.
Up. Montclair, NJ
Industrial Med.


Wulfman, Wm. A.
Meadville, PA
Radiology

Young, W.V.

As a nineteen year-old graduate of a small college, I soon had my ego deflated upon my arrival at Duke when I met my classmates: seventy-two men and women, ages eighteen to thirty-five, with degrees from East to West — Harvard, Yale, Johns Hopkins, University of California, as well as many North Carolina schools. May I share with you some vignettes of what are memorable years at Duke for me?

The calming manner of the Swetts, Hetherington, Edwards and Hollingshead helped me keep my cool. The long day from 6 a.m. until 1 or 2 a.m. included an afternoon game of handball, basketball, or tennis after the lab with Susie (our cadaver), a full meal at the Union for a 25¢ ticket, a short relaxation with Les Brown, then back to the lab or the library until bedtime.

Money was very scarce indeed. Breakfast was coffee and toast in the room atop the tower (C-401), and lunch consisted of a milkshake and a sandwich at the bookstore across from the frat rooms. (This area now comprises space for Dean Anlyan and staff). I remember Dean Davison's favorite retreat — men's room first floor, books stacked all around him with the stall door open while he read and researched material for **The Compleat Pediatrician** or took care of routine business of the School of Medicine. His right hand man, Carl, was always close by to fulfill his every need and request.

Learning not to worry about how one's name is pronounced or spelled necessitates telling a story. On a sunny afternoon in biochemistry lab, my partner, Japeth Rawls, fainted as I obtained his blood by venipuncture. As he fell to the floor, he knocked a Van Slyke apparatus from its mooring. Bob Nickou, with a glow of satisfaction, caught it in mid air. When Dr. Perlzweig ordered, "Nick**ow,** place that on the table before you drop $60.00 worth of mercury!", Bob instantly replied, "My name is spelled N-i-c-k-o-u and pronounced 'Nickoo'. Needless to say, Bob spent the summer in Ann Arbor brushing up on his biochemistry.

Civil War battles were always being waged on campus between Max Rogers, Harvey Vandergrift and Charles Winthrup wherever they met, although these battles actually started in anatomy lab during their first year at Duke.

Spring heralded Physical Diagnosis and Dr. Ruffin's favorite lecture on communicating with patients. "What brought you to the clinic?" Answer: "A Model-T Ford" or "Aunt Matilda". An example of Dr. Ruffin's instructions to be exact and complete in questioning or giving instructions to a patient is shown in the following story. Dr. John Peck removed an endocervical polyp from an elderly patient in the Emergency Room one Sunday at 5 a.m. He sent her home with instructions to return in one week. Her return, the next Sunday at 5 a.m. while he was in West Virginia on vacation, incited the E.R. doctor to call Peck collect and advise him of his patient's return at that early hour.

On another occasion, Dr. Thetford was doing a proctoscopic exam, and with great enthusiasm and excitement called Dr. Ruffin to view a stenosed sigmoid. Yep, she was without a uterus, and the exam was really a colposcopic exam.

Dr. Hansen-Pruss, known for his ability to palpate the spleen (a most important organ in hematology), one day felt that a spleen was greatly enlarged, though at post-mortem exam the following day this "huge" spleen weighed only one gram.

Duke medical students have always been proud of their training and prestige in national and international circles. As a junior and senior student, I recall teaching graduates of Hopkins, Yale and Harvard the techniques for venipuncture and transfusion, and therapeutic approaches to pneumothorax and syphilis. Yes, Duke did pioneer in new approaches to student and intern-resident training.

Being so young and immature, I really didn't grasp the fact that our teachers were so outstanding in their various fields of endeavor. As opportunities arose for me to attend medical meetings and go to other schools as a visiting student and resident, I soon learned how fortunate we were to have department heads like Davison, Forbus, Swett, Smith, Carter, Ross, Hamblen, Hanes, Hart, Anderson, Eagle, Alyea, Shands, Baker, and Callaway.

Upon completion of medical school, I spent a year in Pathology with a great group of men. I remember the time Courtland Berry place partially necrotic hamburger in a specimen of incomplete late abortion. After studying the surgical slide, Dr. ______commented, "This is a most peculiar tumor; it has many striated muscle fibers mixed in with the cells of the embryo and secundines!"

At this time, surely the fastest autopsy on record was performed; it was assigned to me but performed by George Margolis prior to the clash between Oregon State and Duke in the transplanted Rose Bowl game, January 1, 1942.

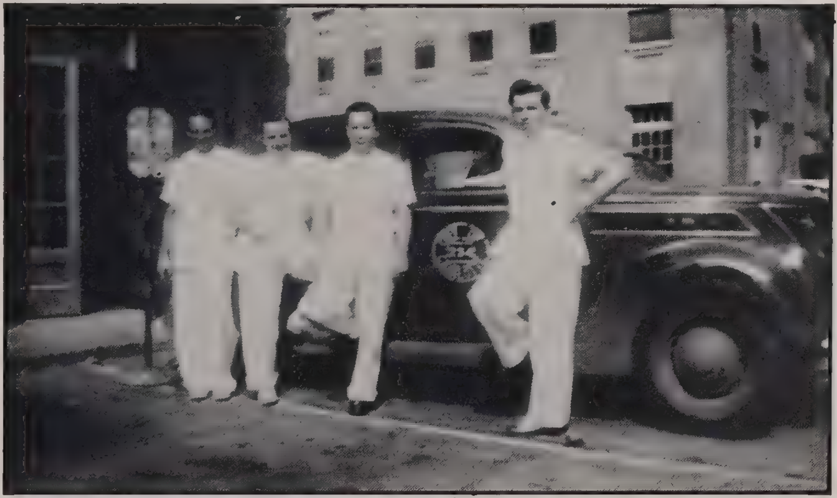
There are many memories of my residency on the Ob-Gyn service. "Nick" Carter met with the residents every morning to review total patient care of the previous 24 hours. On one occasion, as two residents walked to the sleeping quarters and restroom after Dr. Carter had "chewed them out", one said to the other, "That old bastard meant business today!" Unbeknownst to them, "Nick" was seated in one of the bathroom stalls behind closed doors; he spoke up with, "Yes, and this old bastard will chew you out again unless you get on the ball!"

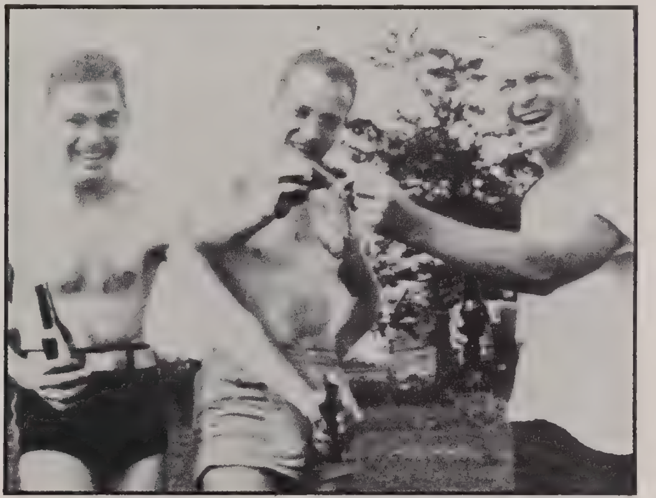
I recall almost all the residents entering the armed services in June, 1944. Preparations for a going-away party included the establishment of a home brewery in a closet next to the office of the secretary of the Department. The disturbing putt-putt noise of the venture necessitated four calls to Maintenance before the secret was discovered. Endocrine residents also re-distilled the alcohol used in urine assays in order to make "purple jesus", a beverage concocted by our Florida friends. Two days after this party, staged at the "410 Club" on Atlas Street, bodies — still alive — were found lying here and there on the grounds and in the house.

With all the pranks, play and enjoyment, as well as laborious hours of study and work throughout medical school and residency training, Duke's graduates have walked among the top in community activities and planning, medical education and organized medicine. They learned from their professors the how, why and when to act or not to act; when to call consultants, and when to refer. The close relationship between professors and students carried beyond the classroom and hospital wards; office doors were always open when one needed advice, and invitations to social activities at the homes of the faculty were often extended to the students.

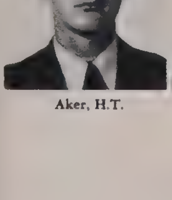
My personal activities in local volunteer work, church and government have kept me extremely busy, and I have also become involved in the activities of the state medical society, federal government, and American Medical Association. Such involvement entailed travel throughout the country and the world to attend many meetings and to meet quite a few of the leaders of medical education and science. Always I have found that my training at Duke Medical Center has prepared me well for acceptance of these opportunities and obligations. For this, I give special thanks to all my professors, most especially to Dean Davison, Dr. Carter, Dr. Ross, Dr. Swett, and Dr. Forbus.

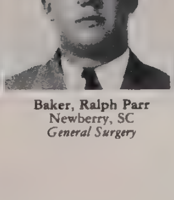
John R. Kernodle, M.D. '42

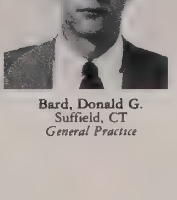

Kerman, Whitts, Simpson, and Butler, July 1941

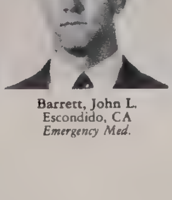

Eagles, Biddle, and Dunlap at the senior class picnic, 1939

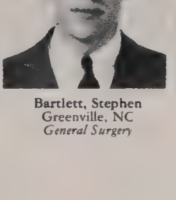
ENTERING CLASS OF 1939

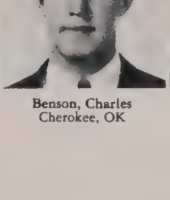

Aker, H.T.

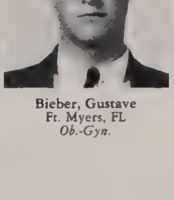

Baker, Ralph Parr
Newberry, SC
General Surgery


Bard, Donald G.
Suffield, CT
General Practice

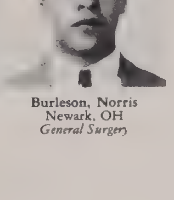

Barrett, John L.
Escondido, CA
Emergency Med.


Bartlett, Stephen
Greenville, NC
General Surgery


Benson, Charles
Cherokee, OK


Bieber, Gustave
Ft. Myers, FL
Ob.-Gyn.

Boucher, George
Long Beach, CA
Pediatrics


Burleson, Norris
Newark, OH
General Surgery

Campbell, John S.
Bay City, MI
Orthopaedic Surg.

Campbell, Robert
Portsmouth, VA
General Surgery

Carlton, Leffie
Tampa, FL
Surgery

Cooper, George J.
Atherton, CA
General Surgery

Dawson, A.N.

Marrow, Lucy J.
Tarboro, NC
Gyn.

Griffith, E.R.

Grimmett, Matthew
Concord, NC
Radiology

Hackett, Walter
Sarasota, FL

Harvey, Harold E.
Beckley, WV
Allergy

Harvey, Watkins
McLean, VA
Cardiology

Herring, E.J.

Hooten, Wm. S.
Lynchburg, VA
Internal Medicine

Howard, H. Lee
Savannah, GA
Pathology

Howard, John C.
Savannah, GA
E.E.N.T.

Howell, Carter W.
Minneapolis, MN

Kash, Roy Mason
Mt. Sterling, KY
Ophthalmology

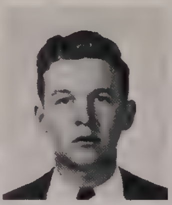
Keese, Anthony V.
S.L. Obispo, CA
Orthopaedic Surg.

Kerhulas, Andrew
Cambridge, MA
General Surgery

Kilgore, Samuel
Tripp Island, SC
Psychiatry

King, Herbert A.
Daytona Beach, FL
Car. Ds.-Int. Med.

Kneipp, John A.
Washington, DC
Psychiatry


Kornegay, Lemuel
Rocky Mount, NC

Massengill, Paul
Greenwood, SC
Ophthalmology

McCulloch, David
Tallahassee, FL
Radiology

Mustard, H.S., Jr.

Kuhn, Beatrice H.
Big Pine Key, FL
Dermatology

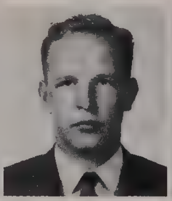
Neese, J.H.

Neikirk, Wm. I.
Charlot'sv'le, VA
Pediatrics

Noel, J.H., Jr.

O'Keeffe, Arthur
Palm Beach, FL

Ott, John Fred.
Greenville, SC
Pediatrics


Peck, J.D., Jr.

Perdue, Maxine R.
Eustis, FL

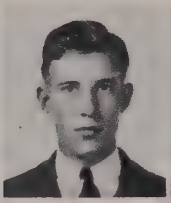
Peters, Wm. A.
Elizabeth Cty, NC
Ob.-Gyn.

Picken, Robert L.
Spokane, WA

Poole, Frank E.
Salisbury, MD

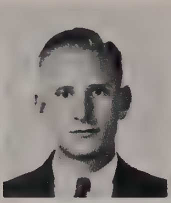
Rausch, Norman W.
Angola, IN
General Practice

Ritchie, J.A.


Roach, Benjamin
Midway, KY

Roma, H.F.

Ruff, R.F.


Sellers, John G.
Norfolk, VA
Oto. & Nasal All.

Siegel, A.

Sinden, R.H.

Spaeth, Walter
Elizabeth Cty, NC
Internal Medicine

Stiles, H.A.

Thompson, Eric D.
Pasadena, CA

Thompson, Kearns
Lexington, KY
Orthopaedic Surg.

Van Arsdall, T.
Harrodsburg, KY
Internal Medicine

Vanderlinde, R.
Hanover, NH
Int. Med.-Endo.

Wallace, J.E.

Wellman, Garland
Houston, TX
General Surgery

Williams, Wm. H.
Rock Hill, SC

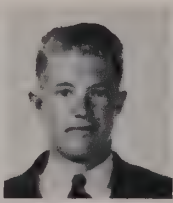
ALSO GRADUATING
WITH THIS CLASS

Brindley, Clyde
Tyler, TX
Medical Oncology

Christian, Ken.
Albertville, AL

Levy, Edward D.
Norfolk, VA
Internal Medicine

Wilson, John M.
Darlington, SC
Gen. Sur & Med.


Woodard, Marshall
Asheville, NC
Ophthalmology

Young, Cabell
W. Palm Beach, FL
Orthopaedics

ALSO GRADUATING
WITH THIS CLASS

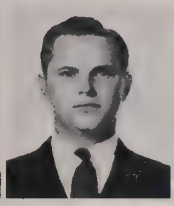
Liversedge, Laur.
Mancester, Eng.

Robinson, Don W.
Charleston, SC
General Surgery

Wooten, Jane
Raleigh, NC
Pediatrics

ENTERING CLASS
OF 1940

Abernethy, P.M.


Albee, Fred H.
Ormond Beach, FL
Orth. Sur. & Reh.

Alter, Albert J.
Tucson, AZ
Ophthalmology

Baeder, Robert L.
Cedar Grove, NJ
Family Practice

Banks, Lawrence
Mercer Island, WA

Bassell, A.J.

Bone, Frank C.
Orlando, FL
GE & Int. Med.

Broome, Robert A.
Orlando, FL
Int. Med.-Car. Ds.

Cann, John E.
Mill Valley, CA

Carll, Jesse W.
Bridgeton, NJ
Ob.-Gyn.

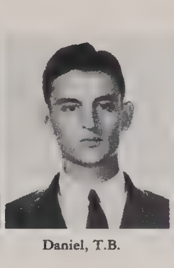
Cole, Lee Marion
St. Thomas, VI

Covey, Anneva F.
Beckley, WV

Crowe, John T.
Cp. Girardeau, MO
Family Practice

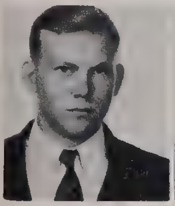
Culbreth, G.G.

Curry, Robert W.
Orlando, FL


Daniel, T.B.

Deaton, W.R.

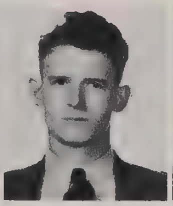
Dickey, James W.
Ft. L'dale, FL
General Surgery

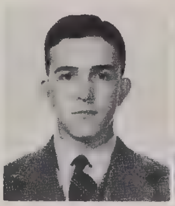

Donegan, Charles
St. P'burg B., FL
Cardiovas. Ds.

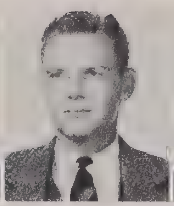
Eagles, Wm. M.
Richmond, VA
Neurosurgery

Erickson, Elmer
McKeesport, PA
General Surgery

Gibson, Marvin M.
Bethesda, MD
Orthopaedic Surg.


Glenn, John C.
Troy, NC
Radiology

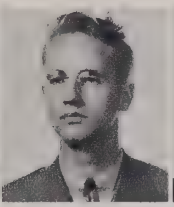

Glover, Nathaniel
Newman, GA
Pediatrics


Gordon, Lawrence
Johnson City, TN

Graham, Emil J.
Pahokee, FL

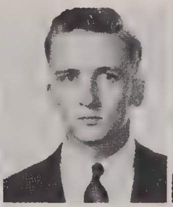
Gras, Alfred E.
South Hero, VT

Hawfield, H.H.


Hazelrigg, Thom.
Olympia, WA
General Surgery

Henderson, Robt.
Honolulu, HI

Hiatt, Wilks O.
Raleigh, NC


Horger, Eugene L.
Deerfield B., FL
Occup. Medicine

Horne, R.D.

Ingram, James M.
Tampa, FL
Ob.-Gyn.

Jones, Martin E.
Granite Falls, NC

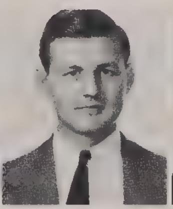
Leeper, William
Gastonia, NC
Internal Medicine

Lusher, R.H.

Matthews, Hugh A.
Cullowhee, NC

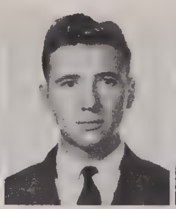
Mayne, R.H.

McCullough, F.H.
Covina, CA
Orthopaedic Surg.

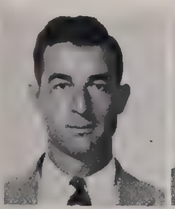

Mixson, J.G.

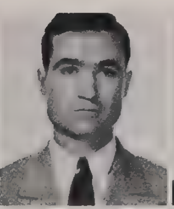
Moody, J.D.

Morgan, Horace L.
Atlanta, GA


Morris, Arthur A.
Washington, DC
Neurosurgery

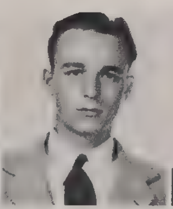
Muller, W.H., Jr.


Oliver, Keith M.
Leesburg, VA
General Practice

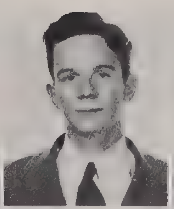

O'Mara, R.J.

Peery, Clarence
Nashville, TN
Internal Medicine

Politano, Victor
Miami, FL


Ramage, Raymond
Greenville, SC
Gen. & Thor. Sur.

Ramsbottom, J.G.


Rhodes, Bernard
Oakland, CA
H'lth Care Admin.

Riggs, M. McA.

Rogers, Stanfield
Memphis, TN
Pathology

Ross, Otho B.
Charlotte, NC
Internal Medicine

Ruskin, Richard
New York, NY
Ob.-Gyn.

Seibels, R.E.

Singletary, Wm.
Durham, NC
Internal Medicine

Singleton, G.W.
Selma, AL
General Surgery

Smith, M. Crego
Belleair, FL

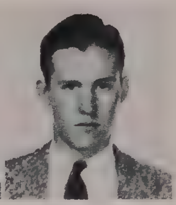
Steelman, H.F.

Thurman, George
Phoenix, AZ

Watson, Walter B.
Casper, WY
Ped. & Pub. H'lth

White, Donald P.
Jacksonville, FL
GE, GE Endoscopy

Wilson, Margaret
Raleigh, NC
General Surgery



Withers, Robert
Tampa, FL
Ob.-Gyn.

ALSO GRADUATING
WITH THIS CLASS

Booth, Orin Watts
Newport News, VA
Pediatrics

Feeney, Michael
San Diego, CA
Urology

Finley, Dorothy
Dallas, TX
Ob.-Gyn.

The year was 1941. In Europe, Hitler's armies were advancing. In the U.S., a peacetime draft was in effect. The seventy-six of us admitted to the freshman class considered war far away, feeling that it would be over by the time we finished medical school.

The first shock came Monday, December 8, 1941. Dr. Swett, Chairman of the Department of Anatomy, announced to the class that the administration of the Medical School had met the day before and decided that our class was to be the first to finish the program in three calendar years. Prior to that date, general opinion was that a student was not physically, mentally, or psychologically able to complete the course without a vacation. We were to prove that it could be done. The Armed Forces added their encouragement by stating that anyone who failed would be inducted immediately. I have heard students refer to the medical school environment as a pressure cooker. The pressure I have just noted.

Bacteriology added the cooker. This course was taught in the summer of 1942 on the third floor of the Davison Building (pre-air conditioning). Seventy-six students and thirty-eight Bunsen burners occupied two large rooms, the windows of which were closed to prevent contamination of plates. Additional heat was supplied by a long white coat which the student wore at all times. We must have been in good physical condition because no one developed heat stroke.

Long white coats were part of the unwritten dress code for 1st and 2nd year students. In the 3rd and 4th years, some wore short white coats. The members of the house staff wore white uniforms and senior staff wore long white coats. The medical student could be identified at all times; you knew, without a doubt, he was not senior staff, because he was not old enough. No one in sports clothes was permitted in the hospital or medical school buildings.

I have unforgettable memories of some of my classmates who will be hereafter identified by letters only. "A" wrote a page and a half, single-spaced, description of a patient's eyegrounds and concluded by saying that it was a perfect example of a normal eye. "B" gave up his room in the dormitory and spent the last two years in school sleeping on a stretcher in the obstetrical wards. He later became a professor of Obstetrics and Gynecology. "C" sang the "Marine Hymn" fortissimo whenever he became inebriated, regardless of the environment (the tap room at the Washington Duke, a class party, the Hope Valley Country Club, etc.). "D" examined a patient with a generalized skin rash which he decided was tinea corporis. He was proud of his diagnosis and cheerfully demonstrated the patient to all classmates until Dr. Callaway pointed out to him that the correct diagnosis was secondary syphilis. He scrubbed his hands down to the first layer of fascia, knowing that his bride of two weeks would never believe that he had acquired the disease innocently. The booby prize would have to be awarded to "C" who, at Dr. Orgain's rounds, quite accurately described several murmurs. He had discovered which patient was to be presented and had memorized the consultant's note. After he had finished his scholarly description, Dr. Orgain said, "That was very good, but I think you would do better if you put the other end of the stethoscope in your ears."

Medical school was not all drudgery; in fact, most of us enjoyed it, especially the Medical School Dance. Dancing at that time consisted of a male and a female holding closely to each other and moving in time to the music. The only time one sees such dancing today is on the Lawrence Welk Show, and the nearest thing we had to the controlled convulsions of today's dancing was called "jitterbugging".

Four dances were held each year, either at the Washington Duke Hotel or the Hope Valley Country Club. All the women wore evening gowns and the men wore business suits, tuxedos, or tails. Rarely did a student or house officer miss the dance and there was always a flurry of people signing out to each other. One night the telephone operator called one of the interns and said, "Do you know, Doctor, that you are on call for the entire hospital!"

Almost all of us, subsequent to internship, were assigned active duty with the Army or Navy and were sent to stations throughout the world. I was sent overseas — as far as Staten Island.

Bernard F. Fetter, M.D. '44

ENTERING CLASS
OF 1941

Atwell, Robert J.
Columbus, OH
Int. Med.-Pulm.

Baker, H.M., Jr.

Beckel, Frank L.
Eastville, VA
Pathology

Benson, Walter R.
Chapel Hill, NC
Pathology

Blackburn, C.M.
Ames, IA

Boatman, Jack H.
Claremont, CA
Orthopaedic Surg.

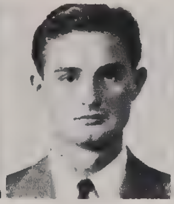
Bradsher, Jacob
Knoxville, TN
Thoracic Surgery

Brenna, Joseph D.
Trenton, NJ
Surgery

Cates, Banks R.
Charlotte, NC

Chambers, R.G.

Chickering, Alan
St. Joseph, MI
Radiology


Collins, John P.
Lakeland, FL
Thor. & Vas. Sur.

Connar, Richard
Tampa, FL
Thor. & Car. Sur.

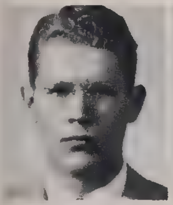
Cronk, Gerald E.
Tulsa, OK

Cronk, Robert T.
Tulsa, OK

Cummings, Martin
Rockville, MD

Dalton, Arthur
Wilmington, NC

Davis, Wm. H.
Winston-Salem, NC
Pediatrics


Davison, W.T.

Douglas, C.C.

Dratz, Henry M.
Castle Point, NY
Hosp. Admin.

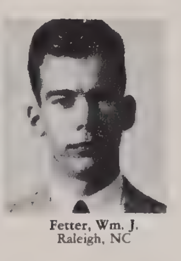
Ducker, Stuart R.
Dayton, OH
Psychiatry

Duckett, Howard
Jacksonville, FL
Ob.-Gyn.

Edwards, Ernest
Savannah, GA
Orthopaedic Surg.

Featherston, Wm.
Jackson, MS
Pathology

Fetter, Bernard
Durham, NC
Pathology


Fetter, Wm. J.
Raleigh, NC

Fordham, George
Mullens, WV

Frazier, Truett
Orlando, FL

Frell, T.C.

French, A.

Fritz, Wilton G.
Ind. Harb. B., FL
Ob.-Gyn.

Gobbel, W.G., Jr.

Green, W.W., Jr.

Hainje, Nannie M.
Tarrytown, NY
Ob.-Gyn.

Hansen, James L.
Glenview, IL
Pathology

Hare, Francis W.
Madison, IN
Internal Medicine

Harris, J.A.

Himadi, George M.
Chapel Hill, NC
Radiology

Honig, Lester J.
North Salem, NY
Internal Medicine

Hooten, Claude G.
Clearwater, FL
Internal Medicine

Horne, R.D.

Hutson, James J.
Miami, FL
Occup. Medicine

Irvin, C. Warren
Columbia, SC
Cardiology

Jonas, Karl C.
Bethesda, MD
General Surgery

Jones, Paxton L.
Youngstown, OH
Gynecology

Kernodle, George
Burlington, NC
Pediatrics

Kubek, Robert B.
C'land Hgts, OH
Internal Medicine

Lawson, John F.
Johnson City, TN
General Surgery

Liles, George W.
Concord, NC
Surgery

Magruder, Wm. W.
Baltimore, MD
Psychiatry

Martin, Thomas L.
Beckley, WV

Massey, George H.
Quincy, FL

Matthews, Walter

McIntosh, Arch.
Marion, NC

Morgan, Wm. C.
Salisbury, MD
Pediatrics

Murray, Wm. Gray
Greensboro, NC
Internal Medicine

Palumbo, Leonard
Chapel Hill, NC

Perkins, Rex B.
Chamblee, GA

Pond, Desmond A.
Exeter Ex 67JA
Psychiatry

Prince, George E.
Gastonia, NC
Pediatrics

Ragland, R.B.

Rankine, George
London, N. 6.

Renner, Richard
Cullowhee, NC

Roberts, H. Lamar
Ocala, FL

Rulon, David B.
Baltic, OH
Pathology

San, James M.
Tampa, FL

Schmidt, Fred
Marietta, GA
Urology

Sexton, Richard
Barrington, RI
Plastic Surgery

Townsend, Bertram
Newport News, VA

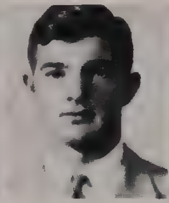
Verigan, R.H.

West, Joseph W.
Kirkwood, MO
Otorhinolaryng.

Wetmore, Robert
Potomac, MD
Psychoanalysis

White, B.H.

Whitesides, Carl
Charlotte, NC



Wilhait, Wm. M.
Pensacola, FL
Neuropsychiatry

Yarborough, John
Maryville, TN

ENTERING CLASS OF 1942

Bloor, Byron M.
Hobbs, NM
Neurosurgery

Boger, Richard E.
Atlanta, GA
Pediatrics

Brinton, Jay O.
Salt Lake Cty, UT

Brooks, Wm. A.
New York, NY

Brower, W.J.

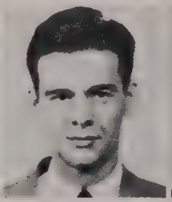
Caudill, Carrell
Charleston, WV

De Nio, Arthur E.
Long Beach, CA
Orthopaedic Surg.

Eberle, E'beth D.
Los Angeles, CA
Ped. Rehab.

Dunn, Adolphus
River Ridge, LA
Orthopaedic Surg.

Eaker, Ralph G.
Shelby, NC



Emlet, John R.
Milton, FL

Farley, J.E.

Flynn, Charles S.
Bluefield, WV
Ob.-Gyn.

Hanson, Frederick
Walnut Creek, CA
Ob.-Gyn.

Harrow, Benedict
Miami, FL
Urology

Hodges, Willis
Columbus, OH
Family Practice

Holman, Bruce C.
Saratoga, CA
Anesthesiology

Holt, Earl P.
St. Louis, MO
Orthopaedics

Hood, T. Ruffin
Richmond, VA

Howell, Moffitt
Lakeland, FL

Jones, Beverly N.
Winston-Salem, NC
Internal Medicine

Kallman, Stanley
New York, NY

Kaplan, Seymour
New York, NY
Psychiatry

Kessler, Alfred

Knight, Victor H.
Tampa, FL
Internal Medicine

Kraycirik, E.T.

Leavell, Ullin
Lexington, KY
Dermatology

Lewis, Charles W.
Orange Park, FL
Urology

Lovell, Wm. F.
Matthews, NC

Lutz, James D.
Hendersonv'le, NC
Anesthesiology

Marshall, R.P.

McClure, John N.
Suwanee, GA
Gen. & Vasc. Sur.

McCulloch, Hugh
Bay Head, NJ
Dermatology

McCune, Frank W.
Hendersonv'le, NC

McGovern, John
Houston, TX

McPerson, A.Z.
Tampa, FL
Pediatrics

Metzger, James T.
Wilmington, DE
Plastic Surgery

Miller, L.S.

Mims, Oscar M.
Thomasville, GA

Moore, T.J.

Newbold, Herbert
New York, NY
Med. Nutrition

Nixon, B.

Paddison, Richard
New Orleans, LA
Neurology

Philips, Jackson
Jacksonville, FL
Ob.-Gyn.

Pittman, Alfred
Lumberton, NC
Internal Medicine

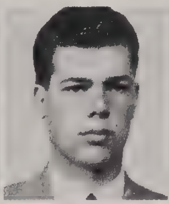
Poole, Grover D.
Jonesboro, AR
Family Practice

Ragland, Robert
Jacksonville, FL
Psychiatry

Ruffin, Clarence
Johnson City, TN
Ob.-Gyn.

Ruskin, G.R.

Russell, Robert
Hagerstown, MD
Ophthalmology


Schwartz, Wm. B.
Newton Centre, MA
Nephrology

Sheldon, Murray
Cincinnati, OH
Int. Med.-Card.

Smith, Stephen D.
Rome, GA
Off. & Med. Dir.

Snyder, Thoburn
Gladwyne, PA
Psychiatry

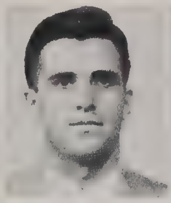
Stainbrook, Ed.
Los Angeles, CA

Stewart, Wm. S.
Pawley's Is., SC
Orthopaedic Surg.

St. John, Harold
Jacksonville, FL

Swain, Wingate
Washington, NC

Taylor, Frederick
Charlotte, NC
Thor. & Car. Sur.


Thompson, Paul
Chattanooga, TN

Vatz, Benjamin
Greensboro, NC
Internal Medicine

Voyles, Carl M.
Bethesda, MD

Watkins, Wm. T.
Newport News, VA
Dermatology

ALSO GRADUATING
WITH THIS CLASS

Dortch, Hugh
Palm Bch. Sh., FL
Pathology

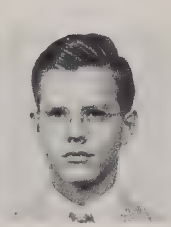
Fowler, Richard
New Orleans, LA
Ped. Cardiology

Lowell, Miller S.
Durham, NC
Radiology

Moody, James D.
Orlando, FL
Thor. & Car. Sur.

Weber, W.D.

Welborn, Samuel
New Orleans, LA
Anesthesiology


White, Hayes M.
Asheboro, NC
General Surgery

Withers, Barron
Solvang, CA
Orthopaedic Surg.

Wulfman, Robert
Huntington, WV

ALSO GRADUATING
WITH THIS CLASS

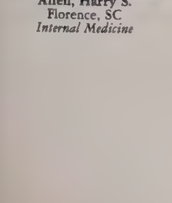
Park, Herbert W.
Richmond, VA

Perkins, Neal C.
Dayton, OH
General Surgery

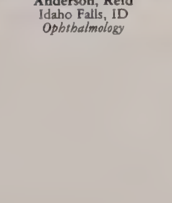
Youngstrom, Karl
Shawnee Mis'n, KS
Anat. & Rad.

Zahn, Albert C.
Fall R. Mills, CA

ENTERING CLASS OF 1943


Allen, Harry S.
Florence, SC
Internal Medicine

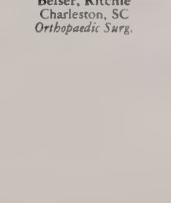
Anderson, C.L.
Lakeland, FL
Ob.-Gyn.


Anderson, Reid
Idaho Falls, ID
Ophthalmology

Anderson, Robert
Alexandria, VA
Pediatrics

Elias, Dorothy I.
W. Roxbury, MA
Gynecology

Bassett, James G.
Havertown, PA
General Surgery


Belser, Ritchie
Charleston, SC
Orthopaedic Surg.

Berne, Alfred S.
Cazenovia, NY
Radiology

Binford, Richard
Hagerstown, MD
Internal Medicine

Bishop, Richard
Fullerton, CA
Surgery

Boone, Alexander
Davenport, IA
Urology

Brazeau, P.

Brink, Wm. R.
Williamsport, PA
Int. Med.-Card.

Broadbent, Thomas
Salt Lake Cty, UT
Pl. & Recon. Sur.

Bryan, John B.
Birmingham, MI

Campbell, Frank
Fayetteville, NC
Surgery

Cottle, Ralph I.
Wooster, OH

Crowell, John M.
Chattanooga, TN

Davis, Frank W.
Baltimore, MD
Cardiology

DeReamer, John
Shreveport, LA
Dermatology

Mickey, Elaine F.
Monroe, LA

Ford, Zenas W.
Newport News, VA

Frankel, Saul A.
Woodbridge, CT
Neurosurgery

Geary, J.M.

Goggans, Walter
Denver, CO
Gen. Surg.-USAF

Golden, James B.
Palo Alto, CA
Neurosurgery

Harrell, Richard
Ann Arbor, MI
Dermatology

Haskell, Edward
Tallahassee, FL

Henderson, C.T.
Marietta, GA
Surgery

Henderson, Wm. N.
Bishopville, SC

Hockman, Thomas
Bay City, MI

Hubbell, David S.
St. P'burg, FL
Thoracic Surgery

Hudson, Carlos
Wellesley, MA
Psychiatry

Jamison, R.H.

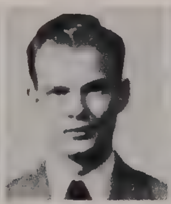
Jones, J. Kempton
Chapel Hill, NC
Family Practice

Kelley, Thomas
Albemarle, NC
Family Practice

Kerby, Grace P.
Durham, NC
Int. Med.-Rheum.

Kohn, H.I.

Koon, Ethen S.
Asheville, NC
General Surgery



Koonce, Duval H.
Jackson, TN
Internal Medicine

Lewis, Thomas H.
Bethesda, MD

Lyons, C.K.

Maines, John G.
Ithaca, NY
Family Practice

Maxwell, Jay C.
Houston, TX
Psychoanalysis

McLeod, Walter A.
Johnson City, TN
Internal Medicine

Ogburn, Paul L.
Troutman, NC

Peacock, H.M.

Pinck, Robert L.
Creeskill, NJ
Radiology

Powell, Ralph
Atlanta, GA
Breast Surgery

Rogers, James W.
Macon, GA

Rowe, W.E., Jr.

Schear, Evan W.
Helotes, TX
General Surgery

Scheid, John E.
Lower Burrell, PA
General Surgery

Schlaseman, Guy
Durham, NC
Radiology

Sherman, Paul H.
Winter Park, FL
Thor. & Car. Sur.

Shugerman, Alwyn
Birmingham, AL
Internal Medicine

Sieber, Homer A.
Roanoke, VA
Int. Med.-Card.

Smeltzer, D.H.

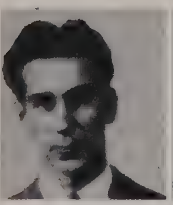
Staub, John D.
Houston, TX
General Surgery

Stitt, R.M.

Suiter, Thomas
Rocky Mount, NC

Symmonds, Richard
Rochester, MN
Ob.-Gyn. & Surg.

Taylor, Lloyd M.
Great Falls, MT
Gen. & Thor. Sur.



Thistlethwaite, J.
Washington, DC

Thompson, Fred
Lenoir, NC
Internal Medicine

Thompson, Robert
Anderson, SC
Family Practice

Tyor, Malcolm P.
Durham, NC
Int. Med.-GE

Valentine, E.H.

Walthall, Joseph
Anaheim, CA

Wannamaker, Lewis
St. Paul, MN

Wayland, E.C.

Webb, Bailey D.
Durham, NC
Pediatrics

ALSO GRADUATING
WITH THIS CLASS

Crompton, Robert
Santa Cruz, CA

Morrison, Ashton
Bound Brook, NJ
Pathology

Williamson, James
Columbia, SC
Gynecology

Willoughby, Dan
Savannah, GA
Internal Medicine

Withington, John
Savannah, GA

Wrenn, Frank R.
Greenville, SC
Neurosurgery

Wycoff, Jack Dunn
Abingdon, VA

Well, 1943 in Duke Medical School was fantastic. I loved every minute of it, including the boys, the profs, Carl, the Dean, and Mrs. Swett. Being one of four females in a class of 60 was great. There was no discrimination, and I was just "one of the boys". I borrowed money to go to school, and I also got a Kellogg loan from Duke; believe it or not, I didn't have to repay the loan until I left Duke, and then with no interest! Meanwhile, I went back to Washington, D.C., on vacations and did private duty nursing to make money to return to school. I had to eat, and God bless my colleagues, the boys; ten or so of them would take me out to dinner at night, though I never knew who paid. We all enjoyed beer and a barbeque or steak (which was rationed); so the steak was horse meat, but still delicious!

First year we were told classes in anatomy were not compulsory as long as we learned the fundamentals. So some afternoons we went into town for the movies, etc. However, the next morning somehow the profs all seemed to know who went where and with whom. It was a family affair, and we soon realized that Unky and Talmadge loved us anyway.

I remember during the first year the professors said they could predict that would happen to all of us. We were shaped by them and later by the "organ": Drs. Orgain, Ruffin, Smith (who always scratched his head), Callaway, and Kempner, who always had an entourage of women following him and who said at the CPC's, "Where you find the carcass, there also you find the buzzards (the pathologists)."

One morning we had a demonstration of proctoscopy. The patient had not been prepared properly, and when Dr. Ruffin inserted his proctoscope, he was inundated with watery feces. He yelled, "Kubek! Kubek!", but to no avail; Kubek had long since disappeared.

We had to have stories of course, and once I had to give a discourse on lung disease with slides; as the slides went on, all the lights were still on and I inadvertantly said, "Please put the lights out; I work better in the dark." At this point, the whole class laughed. Everyone remembers our mornings looking down microscopes while sitting next to each other; Ebo Anderson sat next to me and often goosed me as I sat down on the stool. This happened many times until one morning, I grabbed the hand that did it and turned to find it was the professor, a very embarrassed Dr. Margolis.

Lots of the boys dated nurses, but mostly they dated technicians, which is also a long story. I remember riding to school from the apartments in Kemp's old car. I had to hold the door shut on corners and shift around the back seat to avoid having my rectum injured by the springs.

Some nights Tom Lewis would push his baby into my apartment, and fortunately, it slept well. Ruthie picked it up when she got off night duty at 7 a.m. Weekends we usually had parties out in the cabin in the woods with a keg of beer, etc.

We studied hard and worked in clinics and drew blood in the mornings, but somehow we thoroughly enjoyed days and nights, and no one bitched about anything. The weather was mild, allowing us to sit out on the lawn in front of the Dope Shop for lunch.

We took pride in being part of a serious profession, and the clinic patients thought we were their doctors. One of them refused to have Dr. Odom do a trephination and air injection one morning until I okayed it. Later, she would bring me sausage meat and farm produce on her follow-up visits. I heard from her and her husband for years afterwards.

We all had clean clothes and short trimmed hair; there were no beards or long hair, and no jeans, colored shirts or boots. We took pride in appearing like doctors.

We all adored the Dean who sat on a stool at rounds as little pediatric patients brought him urine specimens that they had tested, or they sat on his knee. His "Assistant Dean", Carl, ran his office like a trusted friend and knew us all by our first names, as did the Dean.

Football games were fun with rubber draw sheets taken off a few beds to ward off the rain, and with rolls of toilet paper swiped from the wards to throw down onto the field at appropriate times, especially if Duke was winning over UNC. Of course, the football field was a lover's lane, occasionally at night!

Times change, but whenever I return to Duke, I love it; I can say that other students, at least around Boston, are missing something special.

Dorothy Armstrong Elias, M.D. '46

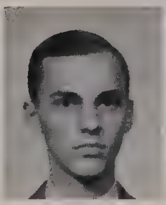
Top: Powell, Lewis, Staub, Crowell, Hubbell, Anderson, Koonce, Haskell, Tyor, Williamson; **Bottom:** Berne, Pinck, Shugerman, Belser, at Umstead State Park, 1945

Back: Willoughby, Koonce, Sieber, Morrison, Anderson, Ford; **Front:** Tyor, Kelley, Armstrong, Scheid, Cottle, at the 30th reunion of the Class of 1946

ENTERING CLASS OF JANUARY 1944

Ambrose, Sam S.
Atlanta, GA
Urology

Blackwell, C.C.


Branscomb, Ben V.
Birmingham, AL
Pulmonary Ds.

Brooks, Wm. L.
Charlotte, NC
Internal Medicine

Browning, Robert
Plymouth, MA

Burgess, John R.
Helena, MT
Sur. & Fam. Prac.

Chandler, James
Miami, FL
Otolaryngology

Clark, S.D.

Clifford, Thomas
Reading, VT
Internal Medicine

Coonrad, Ralph W.
Durham, NC
Orthopaedic Surg.

Crane, H.H., Jr.

Dameron, Thomas
Raleigh, NC
Orthopaedic Surg.

Davison, A.J.

Dawson, James C
Petaluma, CA
Psychiatry

Farley, Albert W.
Saginaw, MI
Neurosurgery

Fawcett, Blake
Eden, NC
Gen. & Thor. Sur.

Ferguson, Thomas
St. Louis, MO
Cardiothor. Surg.

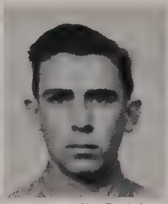
Fillmore, Paul G.
Ventura, CA
Internal Medicine

Froeb, Herman F.
La Jolla, CA

Gutstadt, Joseph
Ross, CA
Psy., Psychoanal.

Hambright, R.R.

Keller, Robert S.
Hemet, CA
Rad.-Nuc. Med.


Kernodle, Dwight
Elon College, NC
Internal Medicine

Lambeth, Wm. A.
Winston-Salem, NC
Internal Medicine

Lattimore, G.F.

Lipe, Robert O.
Aiken, SC

Littman, Donald
Tinton Falls, NJ
Internal Medicine

Longino, Frank H.
Greenville, NC
Gen. & Thor. Sur.

Masterson, John
W. Caldwell, NJ
Vascular Surgery

Mayer, Wm. T.
McComb, MS
Family Practice

McCauley, Ralph
Danville, VA
Urology

McCoy, John M.
Atlanta, GA
Internal Medicine

McWhorter, R.L.
Concord, NC
Internal Medicine

Miller, Loren V.
Tulsa, OK
Pediatrics

Morris, J.R.

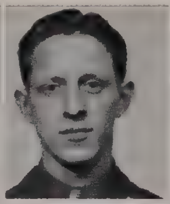
Mundie, Donald R.
Evanston, IL
Pediatrics

Murphy, W.P., Jr.

Nicholson, Henry
Charlotte, NC
Col. & Rect. Sur.

Pace, Sherman
Clearwater, FL
Family Practice

Patterson, Grover
Carthage, MO


Poole, Robert
Raleigh, NC
Pediatrics

Preston, Rhea S.
Birmingham, AL
General Surgery

Pryor, Wm. W.
Greenville, SC
Cardiology

Ritzinger, F.R.

Sammons, Harry C.
Hermann, MO
Anesthesiology

Sharpe, Guy P.
Ocean Springs, MS
Emergency Medicine

Shepard, Kenneth
San Marcos, TX
Ped., Neonat.

Smeltzer, James
Youngstown, OH

Smith, Ernest W.
Phoenix, AZ
Internal Medicine

Smith, Stuart C.
Tallahassee, FL
Dermatology

Snyder, D.D.

Talcott, Leroy E.
Miami, FL

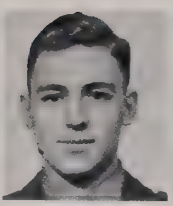
Taylor, Allen
Greenville, NC
Radiology

Teabeaut, Robert
Augusta, GA
Pathology

Teasley, Jack L.
Mequon, WI
Plastic Surgery

Thompson, Robert
Brunswick, GA

Thompson, Wm. W.
Ft. Walton B., FL
All. & Ped.


Thornburg, W.H.

Thorne, Silas O.
Morehead City, NC
E.E.N.T.

Vogell, Fred. C.
Springfield, VT

Wansker, W.C.

Ward, Joseph M.
Greenville, NC

Ware, N.

Wechsler, Harry
McKeesport, PA
Dermatology

Weinberg, Milton
Evanston, IL
Cardiovasc. Surg.

Welsh, Robert C.
Miami, FL

West, E.S., Jr.

White, David C.
Tucson, AZ

Wilchins, Lawr.
Las Vegas, NV
General Surgery

Williams, Roger
Ft. L'dale, FL
General Surgery

Wilson, Leo H.
Sarasota, FL

Wilson, William
Durham, NC
Psychiatry

ALSO GRADUATING
WITH THIS CLASS

Brower, Walter J.
Hayden, AL
Rad.-Nuc. Med.

Carter, Willis H.
Ft. Worth, TX
Urology

Wooten, John L.
Greenville, NC
Orthopaedic Surg.

Wrenn, Richard
Charlotte, NC
Orthopaedic

Zeliff, J.E.

Thirty-six years ago, I had already made a radical move from the very small town of Tchula, Mississippi — population 1,000 — to Vanderbilt University. Now it was time to move on to the next step in my medical education — Duke University. For the country boy I was, the architecture was awe-inspiring in its beauty and the setting most conducive to learning. No one could possibly emerge from this stately setting any less a Shumway or a Salk, both of whom, incidentally, at that time had not been heard of publicly. Then reality set in.

Our class, representing every corner of the United States and some foreign countries, met for the first time in the office of the Registrar. We were greeted, categorized, assigned and made to feel welcome by Mrs. Swett. She solved a thousand problems, answered as many questions, and cured a few cases of second thoughts and homesickness those first few days, while she very patiently and efficiently integrated us into the great Duke University School of Medicine.

Work started immediately in the cadaver lab. Some wise guy informed the girl in his dissection group that her assignment would be to dissect the bone from the male genitals. Her nervous laughter alerted the whole lab to her diligent and futile search, which in turn alerted her to the prank. Her gullibility and good humor vanished with astonishing speed. She gave a convincing short speech which smacked of ERA, and from then on she was just one of the boys.

I'm sure the old tower is still there. I'm wondering if students are startled into waking at all hours of the night by the severe electrical storms peculiar to the area. With the wind and rain lashing at the windows, a sudden flash of lightning would bring the student face to face with his cadaver and back to work for a couple of more hours — but not until he'd finished the half-eaten sandwich which he'd left on the dissecting table before he dropped off.

I recall an amusing incident that occurred on the "Gold Coast", the private patient wing. Someone perched a skeleton on the stool in the elevator. He was nattily dressed, complete with coat, hat and tie. A strategically placed femur was held by two very bony hands. This completed the pose, except for the smile. Don't you know that Dean Davison would have loved finding the ones responsible for that one?

We knew the first year was over when the upperclassmen no longer shunned us in the "Dope Shop". We had clean lab coats and no longer reeked of "Formaldehyde No. 5". About this time we were introduced to a novelty item — the electron microscope. We thought it would never catch on since it was too expensive to be practical!

The upperclassmen started getting married during this second year. They rushed home for lunch with amazing speed and regularity. The rest of us were content to flirt with the girls on East Campus and share their blankets. This fad was featured in Life magazine that year (1945).

Myrtle Beach was the popular "watering hole" for us. The price was right and the distance not too great. Our time was almost as short as our money. One weekend someone caught a sailfish and took it back to school. It became the bedfellow of those who yelled the loudest until the offenders could no longer tolerate moving it.

The third year for us meant finally getting down to business — working with real live patients. We were "DOCTORS"! My first patient was an extremely agitated four year-old who promptly told me off and topped it off by spitting on me. I was not much more mature than he and felt no "doctor" would put up with such behavior. It was degrading to command no more respect than that! As I held my hands behind my back to keep from hitting him, I gently whispered in his ear, "Do that again and I'll knock the hell out of you!" His mother couldn't understand his suddenly docile attitude; it had certainly never happened with any other doctor. She strongly encouraged me to become a pediatrician.

Papa Ross, Father of Ob-Gyn at Duke, as far as I'm concerned, and champion of women all the way, introduced his lecture series with, "Don't expect your bride to go down the aisle as an angel and act like a whore that night." He put a time limit on all female examinations and was very critical of our comments and whistles directed at the student nurses. If he isn't still in charge of that department, I hope someone just like him is.

Working on the wards our final year meant to us that we were definitely proper "doctors" now. We knew everything there was to know — certainly more than any referring physician who had not received any formal training for at least two or three years! Lucky for us, we were still wrapped in the warm security blanket of Duke and not put to the test in that area. Proof of the pudding was not far away, and we quickly learned not to criticize and to do the best with what we had "upstairs". We had been trained in the theory of, "To the book — to the patient — and back to the book." This theory, coupled with experience, has been one of my most useful instruments in practice. I may differ in opinion with many a colleague, but I don't criticize him. I remember another valuable aid to diagnosis we learned that year from a professor whose name escapes me at the moment. "The common things are common and the rare things are rare." It sounds like an over-simplification but seldom has it not worked. The most bizarre symptoms have very ordinary causes if the time is taken to ferret them out.

I recall how busy we were at this time, working up patients after five o'clock admissions for presentation at Grand Rounds the next morning. A fellow classmate offered me $5.00 one night to finish up one of his cases. It sounded like $50.00 to me, so I quickly agreed to help him out. I was pleasantly surprised to confront a very pretty young lady when I entered the room. I proceeded with the routine physical, and when I began to listen to the chest, she said, "I wonder how that other doctor could hear anything without putting those things in his ears?" I gratefully accepted his $5.00 and never asked why he was so generous, but I couldn't resist a sly grin.

It was about this time that the banana diet became a major part of the treatment for cystic fibrosis, and the rice diet was receiving wide recognition in hypertension research. This calls to mind an occasion when Dean Davison was proudly presenting his little banana-eating patients to visiting doctors. One of the visitors asked one of the patients of the 3-4 year-old group how he liked having all the bananas he could eat. Without hesitation he replied, "I think I'm beginning to like the damn things."

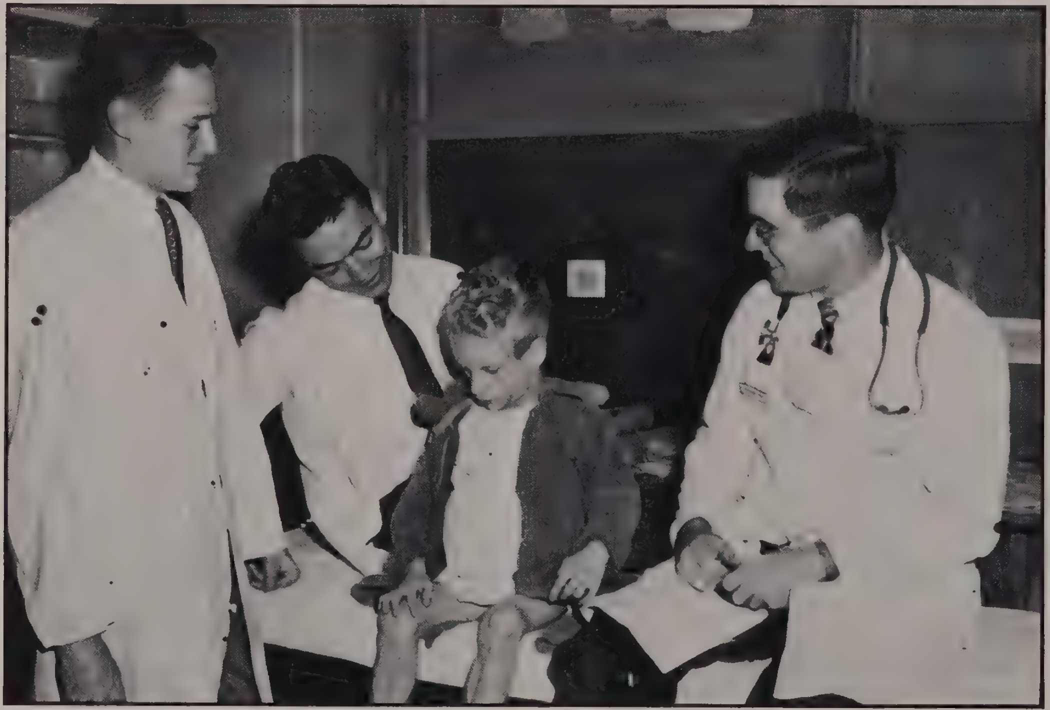
Another first that year was the use of ultraviolet light in surgery to help prevent infection.

Most of my class graduated in December 1946, and I went to Mississippi for a stint with the Health Department. I returned to Duke for the last three months, restless and lonely. Two happenings occurred during this short time which are real landmarks on this trip back in time. The Dean of Women put our fraternity house off limits to her girls, because she confirmed her suspicions that some of them were going in for parties on Friday night and not emerging until Monday morning. My children say that such conduct is accepted practice today. The second incident involved the spending of all the fraternity's savings, which were to be matched by the alumni, to build a new house. When it was discovered that all this money was entered on the expense account as entertainment, I, as president, was impeached in a most impressive ceremony. I hope I retain the distinction of being the only person to be so recognized at Duke University. Other than this, I was just an average med student — most of the time in one kind of hot water or another.

I doubt there is a great difference in the methods of learning today than thirty-six years ago. The teaching aids and lab work are far more sophisticated, and technical knowledge is phenomenal compared to the mid-'40's. Another difference today is that the dress code exists no more, and being of the old school, I still believe a coat and tie lend dignity to the profession.

As all nostalgia brings to light, those were great and happy days. We only remember the pleasant things. I remember working and studying like hell. I remember sleep-walking to work and using each other as guinea pigs. That was one compelling way to learn, because once we got it right, we were on to bigger and better things — sometimes even more humiliating! I remember griping and threatening to quit at least once a week, but you couldn't have made me leave if you tried.

Guy P. Sharpe, Jr., M.D. '47


Picture sent by R.L. McWhorter, Jr., '47

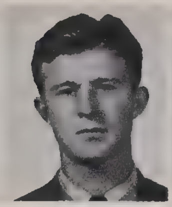
Picture sent by Harry Wechsler, M.D. '47

ENTERING CLASS OF OCTOBER 1944

Andrews, George
Wausau, WI

Arnold, James S.
Hines, IL
Nuc. Med. & Path.

Asbury, D.S.

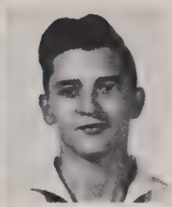

Ashe, John R.
Concord, NC
Ob.-Gyn.

Barden, Graham A.
New Bern, NC
Pediatrics

Barnes, Robert H.
Scottsdales, AZ
Psychiatry

Betts, Wilmer C.
Raleigh, NC
Psychiatry

Blalock, J.V.

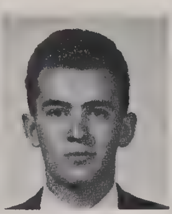

Carter, D.D.

Carver, Gordon M.
Durham, NC
Gen. & Thor. Sur.

Collins, Warren
Kings Mt., NC
Gynecology

Cone, Ross Bache
Denver, CO
Internal Medicine

Corse, Herbert L.
Jacksonville, FL

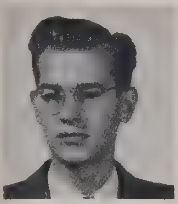

Demaria, Wm. J.
Durham, NC

Dillon, Marcus L.
Lexington, KY

Dorman, Bruce H.
Wilmington, NC
Orthopaedic Surg.

Feriozi, Dan John
McLean, VA
Ped. & Path.

Fish, Harry G.
Rocky Mount, NC


Fisher, R.R.

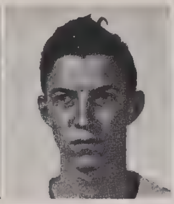
Gage, Lucius G.
Waxhaw, NC
Allergy-Arthritis

Gillen, H.W.

Gowdy, Robert A.
Sherman Oaks, CA

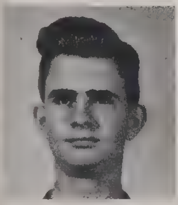
Green, M.E.

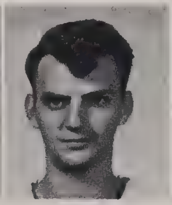
Gunn, Charles G.
Winston-Salem, NC
Occup. Medicine


Hadley, Wm. P.
Gainesville, FL
Pediatrics

Haggerty, Cliff
Redlands, CA

Harris, Louis G.
Tarzana, CA
Internal Medicine


Harrison, James
Honolulu, HI
Psychiatry


Hebb, John H.
Baltimore, MD
Gyn.-Female Uro.

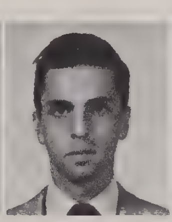
Herring, Howard
Pensacola, FL
Allergy-Immun.

Hollingsworth, J.
La Jolla, CA
Internal Medicine

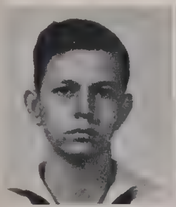
Huntley, C.

Isenhour, Albert
Nashville, TN

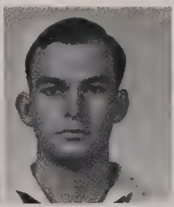
Izlar, H. Leroy
Durham, NC


Javer, Jerome M.
Hillsborough, CA
Neurosurgery

Jay, W. Thomas
Wyomissing, PA
Internal Medicine


Johnson, J.P.

Kalevas, H.J.


Kicklighter, J.

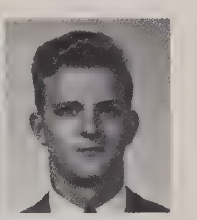
Lies, William
Dothan, AL
Pediatrics

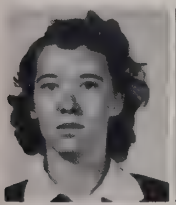
Linberg, Eugene
Naples, FL
Thoracic Surgery

Logue, John T.
Columbia, MO
Internal Medicine

Lorenzen, Robert
Phoenix, AZ
Ophthalmology

Mahony, Donald V.
La Habra, CA
Cardiology


McAlister, Joseph
Huntsville, AR
Radiology


Vingiello, Ruth
Monroe, LA
Ped.-Pub. Health

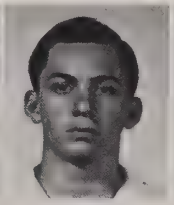
McGee, Theodore
Seale, AL
General Surgery

McKittrick, W.P.

McPherson, Harry
Durham, NC
Endocrinology

McWilliams, Thom.
Phoenix, AZ

Kraus, Jane
Akron, OH
Pathology


Monroe, Berry B.
Florence, SC
Pediatrics

Muller, John C.
Greenville, SC
Internal Medicine

O'Kane, Calvin R.
Sacramento, CA
General Surgery

Parker, J.C.

Robbins, Jack G.
Durham, NC
Dermatology

Sarazen, Paul M.
Shelby, NC
Pediatrics

Sealy, Hugh Key
Macon, GA
Cardiology

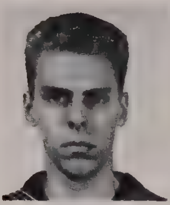
Sheridan, Robert
Rocky Mount, NC
Pediatrics

Sherman, Alfred
Harrisburg, PA
Ob.-Gyn.

Silver, Norman
Scarsdale, NY
Orthopaedic Surg.

Simpson, Zachary
Ottisville, PA
General Surgery

Sinskey, Robert
Malibu, CA
Ophthalmology

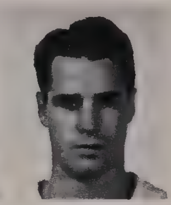

Smith, Chandler
San Fran., CA

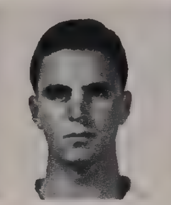
Smith, Lucius S.
Rome, GA

Staehle, George
Short Hills, NJ
Office Proctology

Strone, Bernard
New York City, NY
Internal Medicine

Thayer, Robert H.
El Paso, TX
Internal Medicine


Vardell, James C.
Columbia, SC
Internal Medicine


Waggoner, Lonnie
Gastonia, NC
Internal Medicine

Walker, Isom C.
Gallipolis, OH
Internal Medicine

Wilhoit, Robert
Asheboro, NC

Willett, Robert
Raleigh, NC
Internal Medicine

Williamson, B.H.

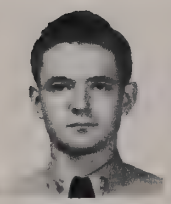
Young, W. Glenn
Durham, NC

**ALSO GRADUATING
WITH THIS CLASS**
Chambers, Robert
Whitehall, MD
Surgery-Oncology

ENTERING CLASS OF 1945

Abernathy, Rob.
Little Rock, AR
Internal Medicine

Alexander, Henry
Charlotte, NC
Int. Med.-Pulm.


Ambrose, Kenneth
Monmouth, IL
Family Practice

Anderson, James
Upland, CA
General Surgery

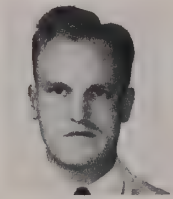
Titchener, A.B.
Cincinnati, OH

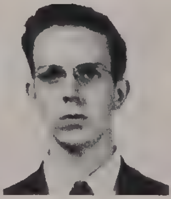
Barry, Carey N.
Fort Myers, FL
Urology

Battle, William
Timonium, MD
Psychiatry

Berry, W.R., Jr.

Bishopric, George
Sarasota, FL
Int. Med.-Card.


Bonnet, Joe L.
Phoenix, AZ
Ob.-Gyn.


Brawner, H.P.

Busby, D.R.

Huntley, Carolyn
Winston-Salem, NC
Ped., All.-Imm.

Cornett, Eugene
Tampa, FL
General Surgery

Crowder, J.N.

Crutcher, James
Atlanta, GA
Internal Medicine

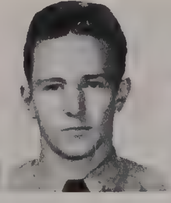
Davis, Daniel W.
Columbia, SC
Thor. & Car. Sur.

Davis, J.C.

Davis, Wayne E.
Winston-Salem, NC
Urologic Surgery

DeYoung, W.A.

Farrior, Richard
Tampa, FL


Flowe, Benjamin
Concord, NC
Gen. & Thor. Sur.

Angell, Ann F.
Ft. L'dale, FL

Furst, William D.
Odessa, TX
Pediatrics

Gentry, W. Harold
Roxboro, NC
Pulm. Ds.

Giebel, J.W., Jr.

Grattan, James P.
New York, NY

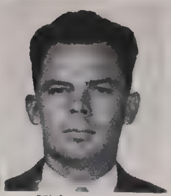
Cochran, Gloria
Bethesda, MD
Pediatrics

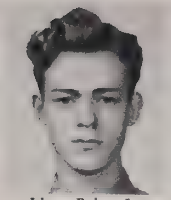
Hallet, Robert
Columbus, OH
Ob.-Gyn.

Hamilton, C.M.

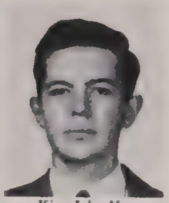
Harman, Louis E.
APO New York, NY
Dermatology

Harris, W.F.


Hickman, W.P.


Isham, Robert L.
Miami, FL

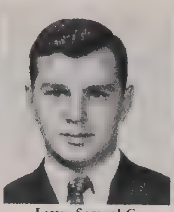
Kibler, Robert F.
Atlanta, GA
Neurology


Kier, John H.
Germantown, TN
Gastroenterology

Krugly, Melvin A.
Oak Park, IL

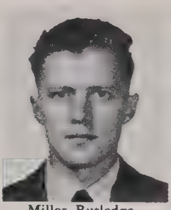
Kuhn, J.L.

Lange, Ramon L.
Elm Grove, WI


Latty, Samuel G.
Winter Park, FL

Loftus, Lawrence
Sacramento, CA

McCall, William
Winston-Salem, NC
Int. Med.-All.


Miller, Rutledge
Blowing Rock, NC
Internal Medicine

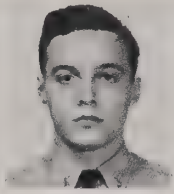
Morgan, James L.
Portsmouth, VA
Pediatrics

Mulligan, M.L.

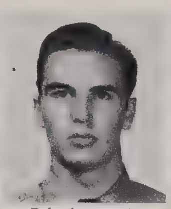
Page, Nina M.
Raleigh, NC
General Practice

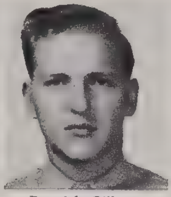
Ninos, G.S.

Northup, Aldrich
Pensacola, FL
General Practice


Osterhout, Suydam
Durham, NC
Infectious Dis.

Page, Ernest B.
Raleigh, NC
Internal Medicine


Rabenberg, Jack
W. Richland, WA
Radiology


Rannick, Gilbert
Johnson City, TN
General Surgery

Riff, Emmanuel R.
Shaker Hgts., OH
Internal Medicine

Roof, B.S.

Schmidt, Dana R.
Worthington, OH
Rad.-Nuc. Med.

Schnaper, Harold
Mt. Brook, AL
Int. Med.-Card.

Schwartz, Lawr.
Seattle, WA
Psy.-Psychoanal.

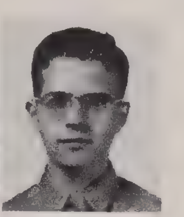
Scott, James Lee
Los Angeles, CA

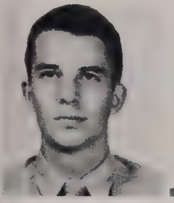
Shipp, James H.
Shreveport, LA

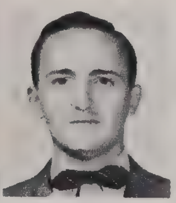
Smith, I.G.

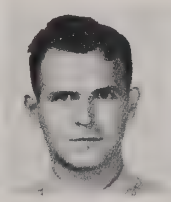
Smith, F.P.

Abernathy, R.S.
Little Rock, AR
Ped. All.


Solon, Earl N.
Evanston, IL
Psychiatry


Titchener, James
Cincinnati, OH
Psychoanalysis


Tompkins, James
Binghamton, NY
Dermatology


Tracey, J.F.

Coonrad, Evelyn
Durham, NC
Hematology

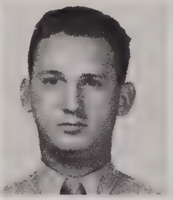
ALSO
GRADUATING
WITH THIS
CLASS

Anderson, Powell
Waynesboro, VA
Family Practice

Fudenberg, Betty
Charleston, SC
Int. Med.-Endo.

Kingsbury, Edward
Union City, TN

Warriner, J.E.


Warshaw, John W.
Little Neck, NY
Anesthesiology

Weatherly, Carl
Greensboro, NC

Wilson, John W.
Conway, SC
Internal Medicine

ALSO
GRADUATING
WITH THIS
CLASS

Ling, Charles C.
Pottsville, PA
General Surgery

Shea, Edward J.
Col. Springs, CO
Family Practice

Zimmerman, Erwin
Huntington, NY
Dermatology

Eating at Josh Turnage's

Eating at Josh Turnage's

ENTERING CLASS
OF 1946

Anderson, Kitrid
Belmont, MA
Neurology

Barnes, Henry F.
Mount Wilson, MD

Bell, William S.
Dallas, TX

Bennett, R.V.

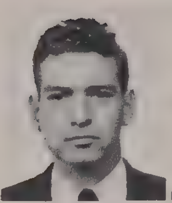
Berry, James B.
Marion, SC
F. Pr.-Int. Med.

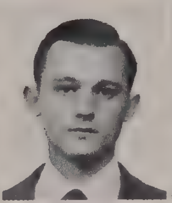
Blake, John R.
Columbia, SC

Blatman, Saul
Hanover, NH
Pediatrics

Bosman, R.I.

Boucher, Wm. Lee
Long Beach, CA
Ob.-Gyn.


Bridgers, John D.
High Point, NC


Bruce, James F.
Opelika, AL

Campbell, Lachlan
Birmingham, AL

Diner, Wilma C.
Little Rock, AR
Radiology

Conroy, J.A., Jr.

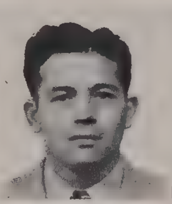
Cook, John Sam.
Welch, WV

Cooper, Gerald R.
Atlanta, GA

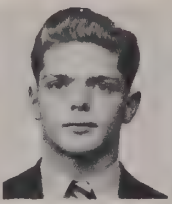
Covington, Alph.
Rockingham, NC
General Surgery

Dick, Frederick
Statesville, NC

DuBose, Howard
Lakeland, FL
Internal Medicine


Fitz, Thomas E.
Hickory, NC
Int. Med.-Card.

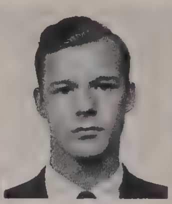
Fraysse, L., III


Garrett, Norman
Greensboro, NC
Int. Med.-Endo.

Georgiade, Nich.
Durham, NC
Plastic Surgery

Greene, John P.
N. Palm Bch., FL
Pediatrics

Hambright, Rufus
Greensboro, NC
Ob.-Gyn.


Hamilton, Edward
Nocatee, FL

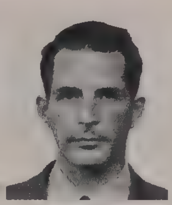
Hamlin, Mervyn R.
Fort Bragg, CA
Family Practice

Harris, Tyndall
Chapel Hill, NC
Disabil. Determ.

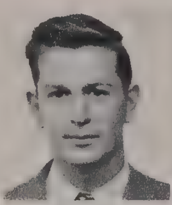
Huff, Albert B.
Wooster, OH
Family Practice

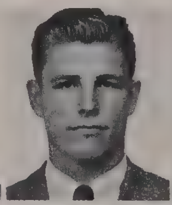
Hunter, Murray B.
Detroit, MI
Internal Medicine

Jennings, Monroe
Claremore, OK
Family Practice


Johnson, Reginald
Ocean Ridge, FL
Radiology

Joy, Vincent A.
E. Rockaway, NY
Int. Med.-GE


Kerns, Thomas C.
Durham, NC
Ophthalmology


Keye, John D.
Redding, CA
Anat.-Clin. Path

Kornegay, Grey B.
East Amherst, NY
Res. Admin.

Leone, Nicholas
Ft. L'dale, FL
Prev. & Int. Med.

Lesesne, John M.
Grosse Pointe, MI
Int. Med.-All.

Lewis, Charles P.
Reidsville, NC
Ophth. & Otolar.

Lewis, Leonard A.
Miami, FL

Magee, W. Edwin
Imperial, MO
Internal Medicine

Mairs, Daniel A.
Charleston, WV
Gynecology

Mathisen, G.E.

McCandless, Dean
Fontana, CA
Family Practice

McKay, Buchanan
Tucson, AZ

Messer, Henry D.
Dearborn Hgts, MI
Neurosurgery

Meyer, G.W.

Miller, David C.
Atlanta, GA

Murdaugh, Victor
Columbia, SC
Int. Med.-Neph.

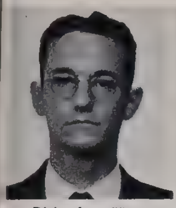
Newell, Ernest T.
Charlotte, NC
Family Practice

Painter, J.C.

Patrick, Simmons
Kinston, NC
Radiology

Perry, William
Hartselle, AL

Poe, R.R.


Richardson, Wm.
Fayetteville, NC
Internal Medicine

Richter, P.

Rippy, William D.
Elon College, NC
Family Practice

Rucker, Douglas
Richmond, VA

Russell, Philip
Asheville, NC
Internal Medicine

Schuyler, Leonard
New York, NY
Internal Medicine

Sellers, Duncan
Norfolk, VA
Orthopaedic Surg.

Seymour, Charles
Ft. L'dale, FL
Pediatrics

Shingleton, Ger.
Johnson City, TN

Spencer, E.H.

Stewart, Robert
Livonia, MI

Sullivan, Marg.
Houston, TX
Ped. Oncology

Vogel, John L.
Columbia City, IN
Internal Medicine

ALSO
GRADUATING
WITH THIS
CLASS

Black-Schaffer
Bloomington, IN

Levinthal, Jeana
Petaluma, CA

Lyons, Wm. Reg.
San Francisco, CA

Sylvester, Joseph
Florence, SC

Williams, Charles
Charlotte, NC
Pulmonary Ds.

Williams, O., Jr.

Worthington, John
Rochester, MN
Int. Med.-Rheum.

Youngs, Harry H.
Sarasota, FL
Family Practice

ENTERING CLASS OF 1947

Agner, Roy Aug.
Salisbury, NC
Internal Medicine

Austin, Charles
Abingdon, VA
Radiology

Austin, James H.
Brookline, MA
Gynecology

Bivens, T.W.

Blue, W.B.

Japenga, Laurena
Covina, CA
Pediatrics

Brock, Julian S.
Rocky Mount, NC
Radiology

Chase, George O.
Orono, ME
Pathology

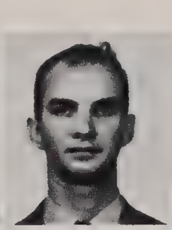
Coggins, Wilmer
Gainesville, FL
Internal Medicine

Coleman, Blair P.
Wichita Falls, TX
Int. Med.-Card.

Conover, Raymond
Glen Ridge, NJ
Pathology

Cook, Paul H.
Spartanburg, SC
Dermatology

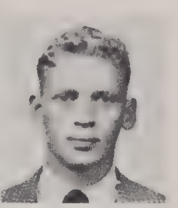
Cranford, James
Jacksonville, FL


Curtis, Thomas E.
Chapel Hill, NC
Psychiatry

Daniel, Thomas M.
Smithfield, NC
Pediatrics

Dimmette, James
Dallas, TX
Ob.-Gyn.

Drake, David E.
Fayetteville, NC


Easterling, John
Hopewell, VA

Engel, Marvin F.
St. Simon I., GA
Dermatology

Evans, Eugene G.
Camp Lejeune, NC
Psychiatry

Fink, Chester W.
Dallas, TX
Ped. Rheum.

Gorsuch, Thomas
Waynesboro, VA
Int. Med.-Card.

Green, Paul Jr.
Salisbury, NC
Ob.-Gyn.

Haltiwanger, Earl
Atlanta, GA
Urology

Hanes, Kenneth F.
W. Newton, PA
General Practice

Hanson, Charles
Geneva, IL
Pediatrics

Hershberger, Rob.
Houston, TX
Internal Medicine

Hiatt, Rudger P.
Mesa, AZ
General Surgery

Holland, Malvern
Greenville, SC
Ophthalmology

Honig, Edward I.
Great Neck, NY
Cardiology

Horne, F. Gregg
Hampton, VA
Anesthesiology

Inman, Charles E.
Fairmont, NC
Family Practice

Jackson, Murray
Sylva, NC
Radiology

Jaeger, Carl A.
Greenwich, CT
Cardiology

Johnson, H., Jr.

Johnston, David
Lexington, KY
Int. Med.-GE

Kandel, Robert F.
W. Palm Bch., FL

Lockhart, David
Concord, NC
Pediatrics

Luzadre, John H.
Grosse Pointe, MI
Ob.-Gyn.

Mandanis, John P.
Arlington, VA
Int. Med.-Card.

Mangum, Jack F.
San Fran., CA
Internal Medicine

McGee, Harry H.
Savannah, GA
Radiology

Melero, Andres T.
Roxboro, NC
Gen. & Thor. Sur.

Mertz, Joanne E.
Petoskey, MI

Spritzer, Susan
Pittsburgh, PA
Gynecology

Jackson, Beverly
Sylva, NC
Pediatrics

Parapid, Nicholas
APO New York, NY

Penton, G.B.

Pruett, Charles
Bluefield, WV
Internal Medicine

Ragland, John E.
Bonnots Mill, MO
Family Practice

Coggins, Deborah
Gainesville, FL
Psychiatry

Remus, Luis E.
Lake Charles, LA

Reynolds, David
Tampa, FL

Rice, A. Douglas
Durham, NC

Schmidt, Evelyn
Durham, NC
Pediatrics

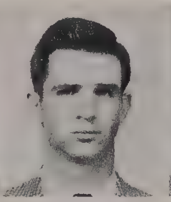
Schnoor, Ernest
Redwood City, CA

Sellers, Alfred
Narberth, PA
Int. Med.-Card.

Shankroff, D.Y

Smith, J. Graham
Augusta, GA
Dermatology

Stanley, Gordon
Sanford, FL


Sullenberger, J.
Tallahassee, FL
Thor. & Vas. Sur.

Underwood, R.S.

Walker, W.F.

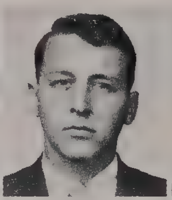
Walters, Paul A.
Winchester, MA
Psychiatry

Warren, Joseph B.
New Bern, NC
Family Practice

Welch, James E.
Las Cruces, NM
Psychiatry

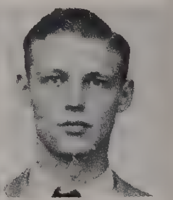
Wester, Thaddeus
Lumberton, NC
Pediatrics

White, Ben Terry
San Fran., CA
Internal Medicine


Whitesides, Ed.
Gastonia, NC
Orthopaedic Sur.

Williams, Harold
Newport News, VA
General Surgery

Williams, L. Howard
Richmond, VA


Wingfield, R.T.
Monroe, VA
Psychiatry

ALSO GRADUATING WITH THIS CLASS

Bledsoe, Robert
Greenville, MS
Ob.-Gyn.

Castle, Charles
Salt Lake Cty, UT
Int. Med.-Card.

Fair, William L.
Chillicothe, MO
Family Practice

Hiatt, Edwin P.
Wilmington, OH
Occup. Med.

Stewart, Donald
Covina, CA

ENTERING CLASS OF 1948

Agner, Marshal E.
Cherryville, NC

Alexander, Lawr.
Sanford, NC

Altany, Franklin
Charlotte, NC
Plastic Surgery

Alter, George F.
Toledo, OH
Anesthesiology

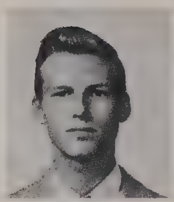
Anderson, Wm. H.
W. Springf'ld, PA
Family Practice

Ardrey, Benjamin
Rock Hill, SC
Pediatrics

Balwin, K.R.

Bethany, Joe J.
Eutaw, AL
General Practice

Bowen, James L.
Littleton, CO


Bowles, Richard
Shelby, NC
Pediatrics

Brass, Philip
Miami, FL
Ob.-Gyn.

Brewer, Spencer
Atlanta, GA
Int. Med. Hem-Onc

Burks, Henry L.
Ft. Worth, TX

Chambers, Robert
Gastonia, NC
Pediatrics

Chears, William
Dallas, TX
Gastroenterology

Coggeshall, B.E.
Cheraw, SC
General Surgery

Cooper, Frank B.
Khamis Mushyat

Corpening, Joseph
Salisbury, NC
Pediatrics

Cox, Howard L.
Schley, VA
Psychiatry

Davenport, Clif.
South'n Pines, NC

David, Noble J.
Coral Gables, FL

Davidson, Norman
Beverly Hills, CA
Int. Med.-Onc.

Davidson, Wm. D.
Washington, DC

Frazer, Joe W.
Greensboro, NC
Thor. & Car. Sur.

Eggers, Mary F.
Columbia, MO

Garrett, Spencer
Lakeland, FL
Ophthalmology

Gomez, Alphonse
San Fran., CA

Graham, Harvey P.
Odenton, MD

Hamilton, F.C.

Hampton, Ambrose
Chapin, SC
Internal Medicine

Hartley, James P.
Washington, DC
Ob.-Gyn.

Harvey, Wallace
Hamilton AFB, CA

Hataway, G.A.

Esoda, Elizabeth
Haddon Hgts., NJ
Dermatology

Jeter, R.V.

Jones, William B.
Birmingham, AL
Cardiology

Kaicher, Thomas
White Plains, NY

Kawchak, James
Berlin, PA
Internal Medicine

Freinkel, Ruth K.
Evanston, IL
Dermatology

Kindler, Jack
Livingston, NJ
Dermatology

Langley, Thomas
Eustis, FL

Link, Robert J.
St. P'burg, FL

Lourie, Herbert
Syracuse, NY
Neurosurgery

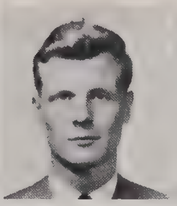
Magill, Frank B.
Rochester, NY
Pediatrics

Mandanis, N.P.

Marder, Gerard
Gastonia, NC
Pediatrics

McCall, Michael
Marion, NC
Family Practice

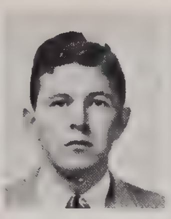
McCarley, Ben P.
Dallas, TX
Pediatrics

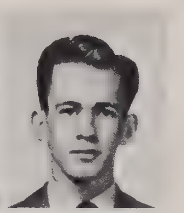

McClung, Eugene
Lewisburg, WV
General Practice

Meyer, George W.
Durham, NC

Moody, Marilyn M.
Dawson Spring, KY

Moody, William A.
Morganton, NC
Mental Health Ad.


Moore, Desaussure
Hopewell, VA


Morris, Francis
Austin, TX
Plastic Surgery

Cook, Helen M.
Arlington, WA

Paar, James A.
St. P'burg, FL
Int. Med.-Card.

Park, Charles W.
Tucson, AZ
Internal Medicine

Pryor, J. Ray
Denver, CO

Reed, Clark G.
San Jose, CA
Internal Medicine

Reinmuth, Oscar
Pittsburgh, PA
Neurology

Savitt, Allen J.
West Allis, WI
General Surgery

Shapiro, Lewis
Great Neck, NY
Dermatopathology

Skeen, Max V.
Miami, FL

Smith, George B.
Apple Valley, CA

Smith, J. Lawton
Miami, FL
Neuro.-Ophthal.

Spencer, H.M.

Stennett, C.E.
Charleston, WV
Internal Medicine

Stewart, Edgar B.
Santa Ana, CA
Family Practice

Tahan, Naim G.
Fresno, CA

Wallace, J.D., Jr.

Wansker, Bernard
Charlotte, NC
Dermatology

Warren, Donald E.
W. Palm Bch, FL
Int. Med.-Card.

ALSO GRADUATING WITH THIS CLASS

Dees, John Tyler
Burgaw, NC
Family Practice

Ellis, Fred. W.
Chapel Hill, NC
Pharmacology

Ewy, Henry Herman
San Diego, CA

Wester, Millard
Henderson, NC

Wolf, Robert L.
New York, NY
Int. Med.-Card.

Wright, Henry L.
Boca Grande, FL
Gen. & Fam. Prac.

Young, R.U.

ALSO GRADUATING WITH THIS CLASS

Peedin, James H.
Burgaw, NC

Travis, Burton L.
Miami Springs, FL

Willis, Kendall
Gastonia, NC
Aerospace Med.

ENTERING CLASS
OF 1949

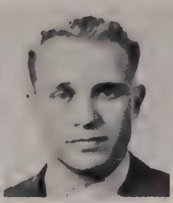
Adams, Reuben H.
Dallas, TX
Ob.-Gyn.

Appen, Raymond C.
Cocoa, FL

Ayerst, Robert I.
New Orleans, LA
Ob.-Gyn.

Bacos, James M.
Silver Spring, MD
Cardiology

Baer, Bruce L.
Baton Route, LA
Int. Med.-GE


Bell, W. Reed
Gulf Breeze, FL
Ped.-Ped. Endo.

Berlin, Melvin
Durham, NC
Family Practice

Berry, Joseph N.
Atlanta, GA
Int. Med.-Card.

Blackard, Embree
San Fran., CA

Bondurant, Stuart
Chapel Hill, NC
Internal Medicine

Boren, Richard B.
Winston-Salem, NC

Brice, George W.
Darien, CT

Bridges, Rowzee
Minden, LA
General Surgery

Brockman, John L.
High Point, NC
Surgery

Bryant, Gerald D.
Tallahassee, FL

Bullard, Lubin F.
Wilmington, NC
Ophthalmology

Butler, Wm. G.
Florence, AL
Ob.-Gyn.

Caffey, John W.
Jacksonville, FL
Anesthesiology

Cain, Frank Coral
Gastonia, NC
Family Practice

Carter, Needham
Rocky Mount, NC
Internal Medicine

Cody, Dorothy
Hays, KS
College Health

Chick, Ernest W.
Nicholasville, KY

Chittum, Raymond
Rittman, OH
Retired

Cobey, William G.
Charlotte, NC
Pediatrics

Earley, Charles
Virginia Bch, VA
General Surgery

Edwards, I. Keith
Olney, IL
Ob.-Gyn.

Evans, Eugene M.
Danville, VA
Dermatology

Evans, William C.
Gainesville, FL
Family Practice

Fishel, John L.
Panama City, FL
Internal Medicine

Flanagan, John F.
Lakeland, FL

Fogleman, Ross L.
Kinston, NC
Family Practice

Fowler, Wm. R.
Chattanooga, TN
General Surgery

Garlington, Laur.
San Fran., CA
Anesthesiology

Gibbes, Robert W.
Columbia, SC
Pediatrics

Gleason, Wm. L.
Lakeland, FL
Cardiovascular

Glenn, James F.
Durham, NC
Urology

Edwards, Ayerst, Baer, and Pierce, 1953

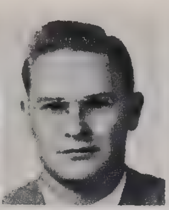
Berlin, Overton, Tatom, Somers, Pierce, and Sager, 1953

On our way to dog surgery: Caffey, Bondurant, Kent, Sager, & Vestal

Ft. Sam Houston summer camp: Edwards, Welch, Overton, & McArn

Hall, Kenneth D.
Durham, NC
Anes., Card.-Thor.

Terrell, Eldora
High Point, NC
Internal Medicine


Hicks, Julius N.
Birmingham, AL
Otorhinolaryng.

Hillman, Charles
Johnson City, TN
Ob.-Gyn.

Keck, Charles
Chester, VT
Orthopaedics

Kent, Alfred H.
Auburn, AL
Gen. & Thor. Sur.

Kernodle, Donald
Burlington, NC
E.E.N.T.

Lawrence, A.F.

Lyday, William D.
Charlotte, NC

Mabe, Paul A.
Reidsville, NC
Family Medicine

Mabry, Edward B.
Greensboro, NC
Ob.-Gyn.

McArn, Hugh M.
Laurinburg, NC
Family Practice

McCall, John B.
Jacksonville, FL

McNeely, Irwin H.
Franklin, VA
General Practice

Meiselman, Rudy
Providence, RI
Urology

Metcalf, Boyd H.
Phoenix, AZ
General Surgery

Niblock, Franklin
Concord, NC
Pediatrics

Overton, Dolphin
Rocky Mount, NC
Ob.-Gyn

Parker, M. Vann
Sanford, FL
Pediatrics

Parkerson, George
Durham, NC
Family Medicine

Pierce, Ellison
Dover, MA
Anesthesiology

Pollard, Lawr.
Monterey, CA
Int. Med.-Card.

Rankin, Richard
Concord, NC
Ophthalmology

Rogers, W.H., III

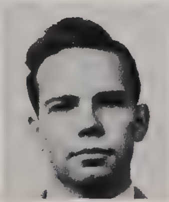
Yobs, Anne C.
Atlanta, GA
Pub. H'lth-Lab.

Rosemond, Robert
Sanford, FL
Internal Medicine

Sager, Samuel O.
Venice, FL

Somers, James E.
Chapel Hill, NC
Psychiatry

Stickel, Delford
Durham, NC
General Surgery


Tatom, L.

Terrell, Eugene
High Point, NC
Internal Medicine

Vestal, Tom A.
Anderson, SC
Ob.-Gyn.

Watt, Thomas B.
Washington, DC
Int. Med.-Card.

Welch, G.H.
St. P'burg, FL
Gen. & Thor. Sur.

Williams, Jean B.
Jacksonville, FL
Ob.-Gyn.

Williams, Jesse
Chatanooga, TN
Urology

ALSO GRADUATING WITH THIS CLASS

Bonner, Octavius
Daytona Beach, FL
Ob.-Gyn.

Borden, Richard
Morehead Cty, NC

Winslow, Francis
Raleigh, NC
Pediatrics

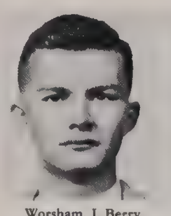
Woodbury, Philip
Eufaula, AL
Family Practice

ALSO GRADUATING WITH THIS CLASS

Davidson, David
Washington, DC
Psychiatry

Harper, Matt C.
Kinston, NC
General Practice

Lane, Harold C.
Rutherfordton, NC
Pediatrics


Worsham, J. Berry
Greensboro, NC

Young, Charles G.
Eden, NC
Internal Medicine

ALSO GRADUATING WITH THIS CLASS

Miller, Augustus
Chapel Hill, NC

Pearson, John K.
Apex, NC

ENTERING CLASS
OF 1950

Adamson, Jerome
Norfolk, VA
Plastic Surgery

Arthur, Robert M.
Richmond, VA
Internal Medicine

Aycock, Wm. G.
Mebane, NC
General Practice

Ayers, John C.
New Bern, NC

Barr, Frank W.
Charlotte, NC
General Practice

Barrett, John A.
Charlotte, NC
Int. Med.-Rheum.

Bouzard, Walter
San Antonio, TX

Brandy, Joseph R.
Ogdensburg, NY
Ob.-Gyn.

Brewer, John M.
Dunwoody, GA

Brock, Charles L.
Ormond Beach, FL
Ophthalmology

Buckley, Charles
Durham, NC
Int. Med.-All.

Carr, Henry J.
Clinton, NC

Clement, James
Greenville, NC
Ob.-Gyn.

Cohen, Harvey J.
White Plains, NY
Dermatology

Constantine, T.
Jacksonville, FL
Internal Medicine

Craddock, John G.
Graham, NC

Crevasse, Lamar
Gainesville, FL
Card. & Comp. Sc.

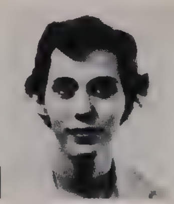
Davis, Arnold
Wyomissing, PA
Gen. & Vasc. Sur.

De Pass, Skottowe
Ridgewood, NY
Radiology

DeLaughter, Geo.
Daytona Beach, FL
Gen. & Thor. Sur.

Elliott, James F.
Creedmoor, NC
Psychiatry

Finch, C. Bryan
Oxford, NC
Family Practice


Floyd, Marian A.
Winter Park, FL
Pediatrics

Forrester, Eugene
Winter Park, FL
Int. Med.-Geriat.

Friend, Louise
Monterey, CA
Dermatology

Gore, J.P.

Gould, Kenneth G.
Morristown, NJ
Pulmonary Ds.

Hair, Thomas E.
Columbia, SC

Hedge, Raymond H.
Tyler, TX

Helms, William K.
Scottsdale, AZ
General Practice

Hewitt, W.C., Jr.

Hill, Paul E.
Flat Rock, NC
Internal Medicine

Holden, Alan B.
Belle Harbor, NY

Holland, Hal C.
Sacramento, CA

Horsley, Howard
Denver, CO
Cardiology

Huber, Donald S.
Huntsville, AL
Int. Med.-All.

Hudmon, Stanton
Jacksonville, FL
Otolaryngology

Jackson, Benjamin
Weston, MA

James, Charles A.
Columbia, SC
Ped. & Adol. Med.

Jones, J. David
Durham, NC
Ped.-Child Psy.

Jones, William B.
Greenville, SC
Orthopaedics

Kelley, James M.
Rome, GA
Orthopaedic Surg.

Kelly, Richard A.
Greensboro, NC
Emerg. Med.

Kenaston, Thomas
Rockledge, FL
Pediatrics

Losin, Sheldon
Sonoma, CA
Neurology

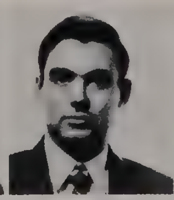
Ludlow, Enoch A.
Spanish Fork, UT

Magee, George F.
Reno, NV
Ophthalmology

Mattox, Huitt E.
Wilson, NC
Ob.-Gyn.

McGerity, Joseph
Mill Valley, CA
Allergy

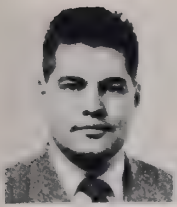
McGowan, Jack L.
Ft. Pierce, FL
Pediatrics


Mebane, Giles Y.
Mebane, NC
Family Practice

Melton, Robert A.
Wilmington, NC

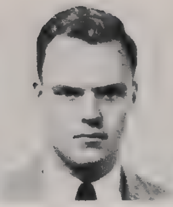
Morgan, Thomas E.
Washington, DC

Musekamp, G.H.


Newman, Gustave
Gainesville, FL
Psychiatry

O'Neill, James F.
St. P'burg, FL
Ophthalmology

Past, Si Alex.
Col. Springs, CO


Patton, R. Gray
San Fran., CA
Pediatrics

Pierson, George
Greensboro, NC
Radiology

Pinsker, Henry
Teaneck, NJ
Psychiatry

Potter, Clyde R.
Washington, NC
General Surgery

Ramey, James Wm.
Danville, KY
Family Practice

Rippy, Girard E.
Dunn, NC

Shapiro, William
Dallas, TX
Int. Med.-Card.

Shugerman, Earle
Birmingham, AL
Internal Medicine

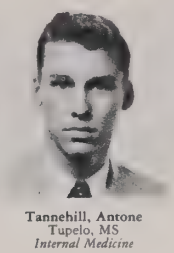
Sing, Robert L.
Charlotte, NC
Pathology

Skipworth, George
Columbus, GA
Dermatology

Spach, Madison S.
Durham, NC
Ped. Cardiology

Stallings, Lacy
Raleigh, NC
General Surgery

Talley, Wm. C.
San Diego, CA


Tannehill, Antone
Tupelo, MS
Internal Medicine

Thomas, A.

ALSO GRADUATING
WITH THIS CLASS
Haiberg, Gordon
Sacramento, CA
Javitt, Norman B.
New York, NY
Liver Disease

Tickle, D. Reid
Wilson, NC
Radiology

Verner, John V.
Lakeland, FL
Internal Medicine

Vetter, John S.
Rockingham, NC
Family Practice

Wanzer, Sidney H.
Concord, MA
Internal Medicine

Williams, Kenneth
Durham, NC
Radiology

Yudell, Robert B.
Charlotte, NC
Ophthalmology

Zuckerman, E.N.

ALSO GRADUATING
WITH THIS CLASS
Rothstein, Leon.
Owings Mills, MD
Psychiatry
Silbergeld, Sam
Garrett Park, MD
Psychiatry

At the time we matriculated at Duke in the fall of 1950, none of us could foresee or fantasize the striking changes in lifestyle, medical education, morality and attitudes that would ensue. Our class consisted of approximately eighty quite different persons, including three women, eight Jews, no blacks, one "fish" (Potter), one "blivet" (Williams), one "great white spider" (Wanzer), and two Georges. Courses included gross anatomy, histology, neuroanatomy, biochemistry, physiology, pathology, physical diagnosis, and the usual clinical courses; it was the old curriculum with little flexibility. However, to us, the opportunity to learn was superior, and the challenge appropriate, our class responded well in all areas. The strength of the curriculum offered at that time is best supported by the subsequent outstanding medical careers of our classmates and others of that time.

I feel certain that many of our lifestyle activities were similar to those of today. We worked hard and played hard; frequented local watering holes such as the Saddle Club and the Blue Light; chased girls (sometimes ladies) actively; successfully survived medical school dances (no mean trick); lived in dormitories, University Apartments and Poplar Apartments; and consumed food during cadaver dissection.

We were not above collective and individual stupidity as exemplified by our behavior at the medical student-faculty show of the early 1950's. Our class treasury balance was $18.00 and it was determined that it would be spent on drinks for the performers. The appointed class representative bought $18.00 worth of lemons, limes, grape juice, and grapefruit juice, borrowed a twenty gallon vat, obtained five gallons of lab alcohol (from where?), and together with water and ice, concocted an interesting punch. This was positioned conveniently behind Page Auditorium and remarkably, was not discovered by the authorities. Many students partook liberally of this refreshment and were found in many unexpected locations the next morning, including some still passed out in the Page Auditorium parking lot. We recently attended our 25th reunion, and I believe we are slightly smarter now.

In conclusion, it is clear that Duke Medical School provided a very solid base upon which to build our medical careers. This is a fact that has withstood the test of time as exemplified by the outstanding contributions of our class, and other Duke classes, to society over many years.

George H. Pierson, M.D. '54

Apartment party, 1953: Rosemond, Welch, unidentified, McCall and Williams.

At Josh Turnage's

ENTERING CLASS
OF 1951

Asbill, David St.
Columbia, SC
Ophthalmology

Bell, Norman H.
Charleston, SC
Endocrinology

Bennett, Paul C.
Goldsboro, NC
Family Practice

Fohlin, Mary B.
N. Reading, MA
Psychiatry

Bethune, Wm. M.
Goldsboro, NC

Bilogan, R.M.

Bjerk, Edward M.
San Jose, CA

Blum, Lawrence M.
Fairfield, CT
Dermatology

Bourland, Wm. L.
Indialantic, FL
Pediatrics

Bramlett, Charner
Spartanburg, SC
General Surgery

Breibart, Sidney
Atlanta, GA
Pediatrics

Britt, Benjamin
Raleigh, NC
Psychiatry

Bynum, Rufus S.
Pittsford, NY
Pediatrics

Carver, David H.
Toronto, Ont

Chamberlin, Frank
Golden, IL
Internal Medicine

Combs, Joseph J.
Rochester, MN
Rheumatology

Cowan, David E.
Rock Hill, SC
Urology

Cronland, M.A.

Crowder, Thomas
South Boston, VA
Pediatrics

Cupp, Horace B.
Johnson City, TN

David, Arthur K.
Jacksonville, FL

Deyton, Robert
Greenville, NC
Ob.-Gyn.

Dukes, Herbert T.
Pensacola, FL
Neurosurgery

Farmer, John L.
Raleigh, NC

Fox, Norman A.
Bozeman, MT
ABFP

Gore, John Pratt
Durham, NC

Gore, Thomas W.
Ft. Myers, FL
Int. Med.-Hem.

Goswick, Claude
Bryan, TX

Graham, Frederick
Asheboro, NC
Family Practice

Haim, Liam
Silver Spring, MD
Ob.-Gyn.

Hilgartner, Marg.
Tenafly, NJ
Ped. Hem.-Onc.

Hutchin, P.P.

Ira, Gordon H.
Jacksonville, FL
Cardiology

James, Joseph M.
Wilmington, NC
Radiology

James, Robert E.
Bloomf'd Hill, MI

Jelks, Allen N.
Sarasota, FL
Pediatrics

Johnson, Harry W.
Greensboro, NC
Ob.-Gyn.

Johnston, Conrad
Indianapolis, IN

Jones, Edward L.
Thomasville, NC

Kinneman, Robert
Alexandria, VA
Prev. Med. & Aer.

Lang, W. Steve
Greenville, SC
Otolaryngology

Langley, John T.
Kinston, NC

Langstaff, Quin.
Florence, AL

Lipton, Harold P.

McAuley, E. Reid
Jacksonville, FL
Orthopaedics

McCall, Ben W.
Houston, TX
Cardiology

Merwarth, Charles
Raleigh, NC
Internal Medicine

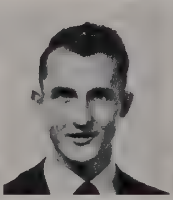
Mitchell, David
Gross Pt Farm, MI
Orthopaedic Surg.

Murphey, W.C.

Neal, Charles B.
Durham, NC
Pediatrics

Ocker, John M.
Boise, ID

Pagter, Townsend
Tryon, NC
Internal Medicine


Pierce, John A.
Wethersfield, CT
Cardiology

Rankin, W.

Reeves, John W.
R. Palos V'de, CA
Thor. & Vas. Sur.

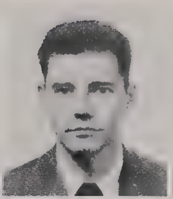
Saunders, Donald
Columbia, SC
Cardiology

Scherlé, E.M.

Silver, Donald
Columbia, MO
Vascular Surgery

Simon, Harold
Chestnut Hill, MA
Rad.-Nuc. Med.

Sledge, John B.
K'l Dvl Hills, NC



Slocumb, Benton
Macon, GA

Smith, Richard B.
Decatur, GA
Pediatrics

Snow, John W.
Jacksonville, FL
Pl. & Hand Surg

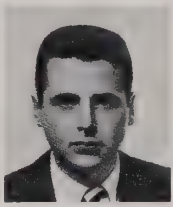
Soo, K.W.

Spanel, D.L.

Steagall, Robert
Charlotte, NC

Stillwell, E.F.

Stokes, Thomas A.
Durham, NC
Gynecology



Strauss, S.

Taylor, E.L.
Sparta, NC
Emerg. Med.

Thames, Thomas B.
Orlando, FL
Family Practice

Watson, David F.
Muskogee, OK

ALSO GRADUATING
WITH THIS CLASS

Alexander, Gerald
Miami Beach, FL
Int. Med.-Card.

Graham, John D.
Indianapolis, IN
Internal Medicine

Leslie, Robert A.
Laguna Beach, CA

Mandrick, Fred H.
Los Angeles, CA

West, Bryan C.
E'beth City, NC
Ob.-Gyn.

Wiggs, Eugene O.
Denver, CO
Ophthalmology

Wiita, R.M.

Wilder, B. Joe
Gainesville, FL
Neurology

Williams, Dana S.
Houston, TX

Young, James M.
West Newton, MA

Young, W.M., Jr.

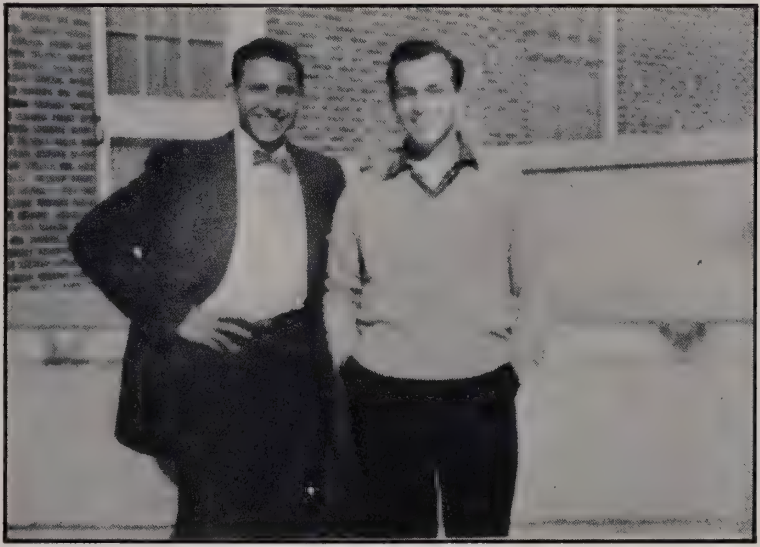
ALSO GRADUATING
WITH THIS CLASS

Vitols, Edite T.
Richmond, VA
Psychiatry

Bourgeois-Gavar
Durham, NC
Anesthesiology

Ritter, Marion W.
Jacksonville, FL

Morgan, Beverly
Bellevue, WA



Alan Solomon and Mel Schwartz, 1957

Allen Jelks, 1955

ENTERING CLASS OF 1952

Allison, Ronald
Stuart, FL
U'wtr Med. & Ger.

Barton, Dewey L.
Valdosta, GA
Radiology

Benson, Gordon D.
Wyncote, PA
Medicine

Bootle, W.A., Jr.

Brown, Edward B.
Waycross, GA
Ob.-Gyn.

Bryan, Wm. B.
Charlotte, NC

Carmichael, D.E.
Birmingham, AL
Gynecology

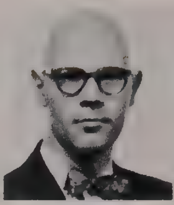
Carswell, A., Jr.

Coffin, Lewis A.
Winston-Salem, NC
Pediatrics

Cranford, Harold
Lexington, NC

Crenshaw, M.C.
Durham, NC
Ob.-Gyn.

Culton, Julian C.
Charlotte, NC
Ophthalmology


Culton, Yancey G.
Durham, NC
Ob.-Gyn.

Davis, Wm. Alex.
Charlotte, NC

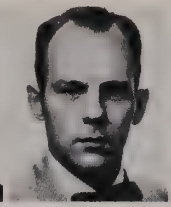
Deiss, Elmer A.
Salt Lake Cty, UT

Dickinson, W.A.
Va. Beach, VA
Cardiology

Dorsey, Charles
Spokane, WA
Pediatrics

Dozier, Laurie L.
Tallahassee, FL
Cardiology

Easterling, James
Lakewood, FL
Otolaryngology


Failing, Robert
Santa Barbara, CA
Pathology

Foster, Richard
San Antonio, TX

Fredericks, Rich.
New York, NY

Freedy, Lucy R.
U. Arlington, OH
Adolescent Med.

Gehweiler, John
Durham, NC
Radiology

Gibson, James F.
Sanford, NC
General Surgery

Griffin, Harvey
Petersburg, VA
Pathology

Hardison, Joseph
Raleigh, NC
Int. Med.-GE

Harley, E.L.

Hassler, Wm. L.
Elyria, OH
Orthopaedic Surg.

Hollett, Alan M.
Arling. H'gts, IL
Family Practice

Howard, Robert M.
Savannah, GA
Pathology

Hutchin, Peter
La Jolla, CA
Thorn. & Car Sur.

Jackson, James R.
Lakeland, FL
Neurosurgery

Jackson, Joseph
Cor. Christi, TX
Ped. Radiology

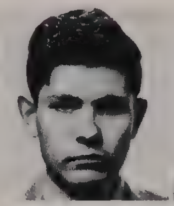
Johnson, Douglas
Tavernier, FL

Josefiak, Eugene
Roanoke, VA
Pathology

Kent, Horace S.
Mesa, AZ
Internal Medicine

Koger, Edward R.
Orlando, FL

Lang, Frank A.
Dallas, TX
Orthopaedic Surg.


Lee, Pope M.
Rowland, NC
Family Practice

Mangum, Vernon
Goldsboro, NC
General Practice

Metropol, Harry
Columbia, SC
Gen. & Thor. Sur.

Miller, Edmond
Durham, NC
Int. Med.-Card.

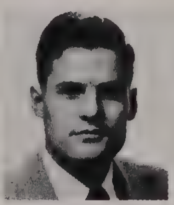
Mostellar, Henry
Mobile, AL
Neurosurgery

Mundy, E.J., Jr.

Neal, John W.
Gibson, NC

Newell, Bruce
Indian Lake, FL
General Practice

Pearson, Hugh O.
Beaufort, SC
Family Practice


Pollock, James H.
Boynton Bch, FL
Orthopaedic Surg.

Askew, Anne P.
Raleigh, NC

Ratchford, G.R.
Rocky Mount, NC
Internal Medicine

Renuart, A.W.
Durham, NC
Ped. Neurology

Rollins, Robert
Raleigh, NC
Forensic Psych.

Roseberry, Philip
Hellam, PA
Family Practice

Ross, James V.
Rochester, MN

Rutnoski, P.A.

Mangum, Virginia
Goldsboro, NC
General Practice

Schachter, Jerome
Endwell, NY
Neurosurgery

Shands, Joseph W.
Gainesville, FL
Internal Medicine

Shealy, C. Norman
La Crosse, WI
Holistic Med.

Shoemaker, Carrol
Burlington, NC
General Practice

Sloan, James M.
Asheville, NC

Steele, Richard
Asheville, NC
Internal Medicine

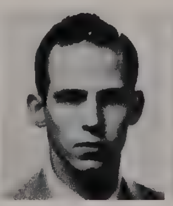
Steiner, Sheldon
Wilmette, IL

Sterling, L.N.

Tanaka, Shin
Minneapolis, MN

Townsend, James
Jacksonville, FL
Pediatrics

Turner, John C.
Fairmont, WV


Vance, Thomas D.
Boone, NC
Diagnostic Rad.

Walton, George B.
Chadbourn, NC
Radiology

Whanger, Alan D.
Durham, NC
Psy., Adult & Ger.

Whitaker, Harry
Springfield, VA
All.-Imm.

ALSO GRADUATING
WITH THIS CLASS
Horne, Andrew F.
Oakton, VA
Aerospace Med.
McGough, Wm. E.
Colts Neck, NJ
Psychiatry

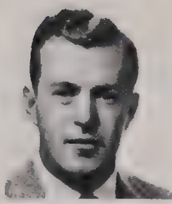
White, F.A., Jr.

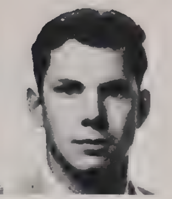
Wilbanks, George
Chicago, IL
Ob.-Gyn., Onc

Wilkinson, Char.
Wilmington, NC
Thor. & Vas. Sur

ALSO GRADUATING
WITH THIS CLASS
Olansky, Sidney
Avondale Est., GA
Dermatology

Wilson, Colon H.
Atlanta, GA
Int. Med.-Rheum


Windom, Robert E.
Sarasota, FL
Internal Medicine


Young, Hadley R
Duluth, MN
Dermatology

ALSO GRADUATING
WITH THIS CLASS
Schweig, Noel A.
Washington, DC
Paulson, George
Columbus, OH
Neurology

ENTERING CLASS OF 1953

Anderson, Herbert
Tallahassee, FL

Andrews, Billy F.
Floyds Knobs, IN

Bacon, George E.
Ann Arbor, MI
Pediatric Endo.

Barnhill, Lamuel
Boca Raton, FL
Family Practice

Barrick, Harry W.
Raleigh, NC
Family Practice

Bedell, Richard
Boulder, CO
Pediatrics

Blackard, Wm. G.
Richmond, VA

Blount, R.E., Jr.

Bowles, Thompson
Washington, DC
Thoracic Surgery

Bromberg, Albert
Springfield, NJ
Child Psych.

Bunn, Joseph P.
Maitland, FL
Pediatrics

Cannon, Stanley
Miami, FL
Otolaryngology

Creighton, Burns
Tampa, FL
Ophthalmology

Dulin, Thomas L.
Charlotte, NC
Family Practice

Entesham, T.

Elder, T. David
Norfolk, VA
Rheumatology

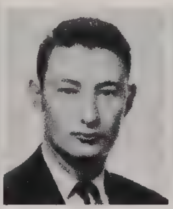
Ellington, Robert
Burlington, NC

Fennell, Thomas
Miami, FL
Psychiatry

Fisher, Elbert L.
Miami, FL
Ob.-Gyn.

Fulton, James W.
High Point, NC
Ob.-Gyn.

Gibson, Thomas G.
Gibson, NC


Givens, Dingess
Downers Grove, IL
Insur. Med.

Watts, Lois H.
Seattle, WA

Hall, James S.
Fayetteville, NC
Pediatrics

Harley, Eugene L.
Atlanta, GA
Internal Medicine

Hill, David B.
Lynchburg, VA

Holly, P.A.

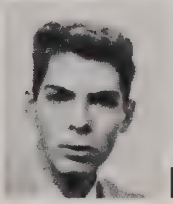
Howell, Rodney
Houston, TX
Ped.-Genetics

Howse, Ralph M.
Rome, GA
Urology

Hurst, Lawrence
Spartanburg, SC
Otolaryngology

James, W. Scott
Atlanta, GA
Pediatrics

Johnson, Paul A.
Holmes Beach, FL


Karpman, Stephen
San Fran., CA
Psychiatry

Keller, Donald H.
Tampa, FL
Orthopaedic Surg.

Osterhout, S.K.
Durham, NC
Ped. & Med. Ed

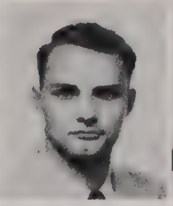
Kitlowski, Edward
Baltimore, MD

Knickerbocker, F.

Komrad, Eugene L.
Coral Gables, FL
General Surgery

Lackey, Dixon A.
Atlanta, GA
Aerospace Med.

Lebauer, S.I.

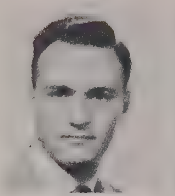

Lewis, William R
Carmel, CA
Neurosurgery

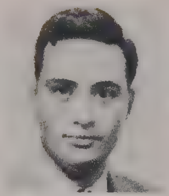
Woods, Dorothy L.
Napa, CA

McInnis, Angus G.
Reidsville, NC
Family Practice

Moseley, Robert
Raleigh, NC
Pediatrics

Myrick, Samuel E.
Jacksonville, FL


O'Mansky, Boris
Pikesville, MD
Pediatrics

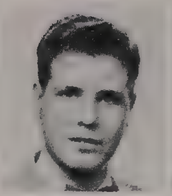

O'Mansky, Samuel
Baltimore, MD
Internal Medicine

O'Neill, J. Frank
Miami, FL
Ob.-Gyn.

Painter, Wm. E.
Lynchburg, VA
Rad.-Nuc. Med.

Pantelakos, Cons.
Fayetteville, NC
Otolaryngology

Patrick, Roman L.
St. Louis, MO
Pathology


Pepper, George
Palatine, IL
Ob.-Gyn.

Perkins, Henry
Raleigh, NC
Internal Medicine

Pillsbury, R., Jr.

Poston, Robert L.
E'beth City, NC
Family Practice

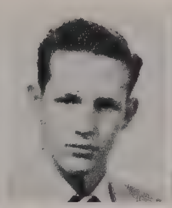
Powell, Albert
Norfolk, VA

Procter, Wm. Ivan
Raleigh, NC
Internal Medicine

Redmond, James S.
Lynchburg, VA
Radiology

Reese, Owen, Jr.
Panama City, FL
Internal Medicine

Ridgeway, Nathan
Kingsport, TN
Internal Medicine


Rogers, Richard
Weaverville, NC
Pediatrics

Roughton, Ralph
Atlanta, GA
Psychoanalysis

Sanders, Clyde V.
Atlanta, GA

Sappenfield, L.
Fayetteville, NC
Ophthalmology

Satterfield, G.
Greenville, NC

Schulz, Harold P.
Daly City, CA

Schwartz, Melvin
Newton, MA

Seagle, Lee M.
Hickory, NC

Shingleton, Hugh
Birmingham, AL
Gyn. Onc.

Smith, Robert L.
Seattle, WA
Ob.-Gyn.

Smith, Whitman E.
Albermarle, NC
General Surgery

Solomon, Alan
Knoxville, TN
Hem.-Onc.

ALSO GRADUATING
WITH THIS CLASS

Bressler, Rubin
Tucson, AZ
Clinical Pharm.

Grunt, Jerome A.
Shawnee Mis'n, KS
Ped. Endo.

Schulz, Harold P.
Hillsborough, CA
Ophthalmology

Spoto, Angela P.
Lakeland, FL
Int. Med.-All.

Sweeney, Leslie
Raleigh, NC
Family Practice

Thorn, Druery R.
Norman, OK
Student Health

Weiss, Edward B.
St. P'burg, FL

Yancey, Henry A.
Richmond, VA
Orthopaedic Surg.

Zener, Karl A.
Washington, DC
Psychiatry

Zerby, A.W., Jr.

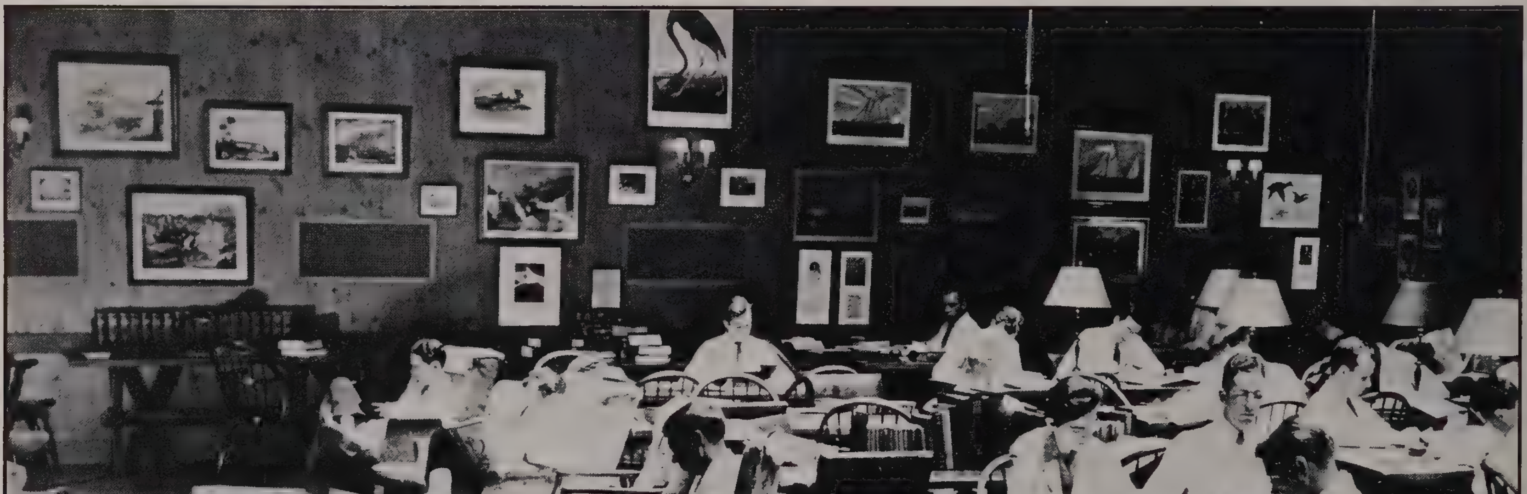
ALSO GRADUATING
WITH THIS CLASS

Taylor, Robert W.
Warren, OH
Neurosurgery

Wilkes, Marcus B.
Brownsville, KY

Harrison, Thomas
Tampa, FL

Meltzer, Curtis
Miami, FL


Medical Library, Davison Building, taken before 1956

ENTERING CLASS OF 1954

Allen, Irving E.
San Bernadino, CA

Altman, Robert S.
Miami, FL
Emer. Med. & Ped.

Anderson, E. E.
Durham, N.C.
Urology

Barnhardt, Luther
Asheville, NC
Rad. & Nuc. Med.

Bell, John H.
Knoxville, TN
Ortho. Surgery

Berry, Roger J.
London, UK
Oncology

Bingman, Ronald
Houston, TX
Int. Med.-Neph.

Borders, Donald
Fresno, CA
Anesthesiology

Brandt, Robert J.
Baltimore, MD
Occupational Med

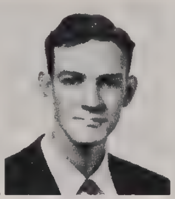
Bryant, Wm. F.
Charlotte, N.C.
Pediatrics

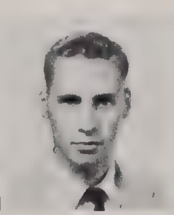
Byers, Frank M.
St. Petersburg, FL
Thor & Card Surg

Cassady, George
Birmingham, AL

Chambers, Robert
Winston-Salem, NC
Pediatrics

Christie, John N.
Switzerland, FL
Int. Med.-G.E.


Dixon, J. Elliott
Ayden, NC
Family Practice


Dunn, John T.
Charlot'ville, VA
Endo.-Int. Med.

Evans, Jack C.
Lexington, NC
Pediatrics

Evans, John Steed
Greenville, SC
Urology

Furth, John J.
Lansdowne, PA

Garcia, Gould C.
Emporia, KS
Internal Medicine

Garcia-trias, D.
Hato Rey, PR
Ped. Allergy

Goldberg, Donald
Rockville, MD
Psychiatry

Graham, Thomas C.
Newnan, GA
Ob-Gyn

Griffin, Ashton
Goldsboro, NC
Family Practice

Grodsky, Leonard
Newton, NJ
Ob.-Gyn.

Grunert, D.H.

Guin, Thomas D.
Ocala, FL

Handy, John R.
Augusta, GA
Internal Medicine

Harris, Barry C.
Sewickley, PA
Card.-Int. Med.

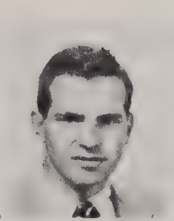
King, Elizabeth
Durham, NC

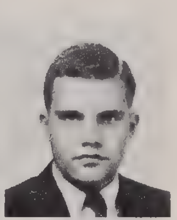
Hartsell, Charles
South'n Pines, N.C.

Heine, M. Wayne
Lubbock, TX

Hernandez, Rafael
Santurce, PR

Howell, Talmadge
Colonial Hts., VA


Howerton, Philip
Morganton, NC
Radiology


Hurlburt, James
Winter Park, FL
Int. Med.-Card.

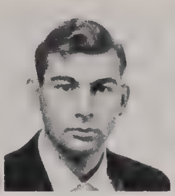
Ingalls, Jerry M.
Paris, IL
General Surgery

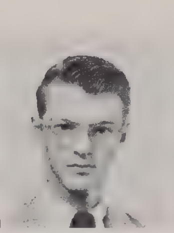
Johnson, Albin W.
Raleigh, N.C.
Ophthalmology

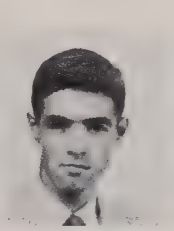
Johnson, Herbert
Tampa, FL
Radiol.-Oncol.

Johnson, James A.
High Point, NC
Neurosurgery

Johnston, W.W.


Jones, Billy E.
Greenville, NC
Dermatology


Jones, David R.
San Antonio, TX
Psych.-Aero. Med.


Kirkland, Thomas
Charleston, SC
Urology

Laughlin, Edward
Huntsville, AL
General Surgery

Lee, James M.
Greensboro, NC
Card & Thor Surg

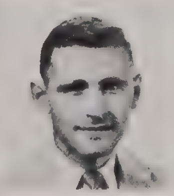
Lee, John Everett
Atlanta, GA
Neurology

Mahaley, M. Jr.

Mallory, James D.
Atlanta, GA
Psychiatry

Lee, Shirley M.
Clifton, NJ

Mason, Dean T.
El Macero, CA
Cardiology


McCracken, C. Jr.
Billings, MT
Ped/Mat-Chld Hlth

Milam, John
Stephens City, VA
Urology

Mitchel, Calvin
Tampa, FL
Ophthalmology

Moore, Irwin B.
Cleveland, OH
Gastroenterology

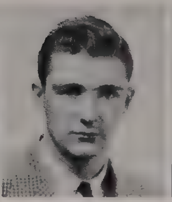
Morphis, James O.
Hartsville, SC
Pediatrics

Olsen, R. L.

Pate, B. R.

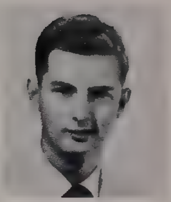
Phillips, Ran L.
Monroe, LA
Internal Medicine

Porter, Virginia
New Orleans, LA
Anesthesiology



Porter, George H.
New Orleans, LA
Hem.-Onc.

Rackley, Charles
Birmingham, AL
Cardiology



Rollins, Hal Judd
Greensboro, NC
Ophthalmology

Satterwhite, M.
Winston-Salem, NC
Otolaryngology

Scheil, Charles
Lenoir, NC
Family Practice

Shofer, Robert J.
Huntingtn Bch, CA
Neurology

Smiley, Douglas
Los Angeles, CA

Strader, Hunter
Lexington, NC
Family Practice

Thorne, Lawrence
Sugar Land, TX
Ped. Allergy

Thorne, Norman
Asheville, NC
Radiology

Tucker, Daniel N.
Palm Beach, FL
Allergy

Tucker, Donald
Greenville, NC
Cardiology

ALSO GRADUATING
WITH THIS CLASS

Asadi, A.M.
Bagdad, Iraq

Cheshire, McKin
Palm Beach, FL
Psychiatry

Christian, Don
Tucson, AZ
Ob.-Gyn.

Warner, Charles
Charlotte, NC
Pediatrics

Wergeland, Floyd
Kensington, MD
Ophthalmology

West, E. T. Jr.

White, A. W. Jr.

Wilson, N. J.

ALSO GRADUATING
WITH THIS CLASS

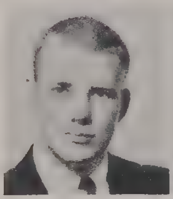
Fraumeni, Joseph
Bethesda, MD
Oncol.-Epidem.

Nelson, Karla W.
Greenville, NC

Spanel, David L.
Princeton, NJ

Weaver, Wm. T.
Atlanta, GA
Cardio

ENTERING CLASS OF 1955



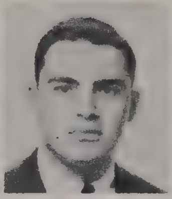
Albertson, Thos.
Lynchburg, VA
Ped. Allergy

Alexander, Clyde
Jackson, TN
Radiology

Baker, Horace P.
Thousand Oaks, CA

Bean, Richard L.
Jacksonville, FL
Radiology

Boineau, John P.
Augusta, GA



Bowen, Edward G.
Atlanta, GA
Ob.-Gyn.

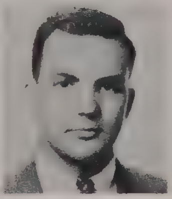
Brewer, James C.
Greensboro, NC
Family Practice

Brooks, David W.
Jacksonville, FL
Radiology

Chandler, Arthur
Durham, NC
Ophthalmology

Clontz, J.M.

Cohen, Leon
Portola Vlly, CA
Neurology



Cooper, Tim Ervin
Charlotte, N.C.

Courie, M. N.

Cronce, Paul C.
Atlanta, GA
Dermatology

Engstrom, George
Concord, NC
Pediatrics

Evans, John H.
Knoxville, TN
Pathology

Fischberg, Bruce
Newton, MA
Psychiatry

Forline, John W.
N. Caldwell, NJ
Dermatology

Gaddy, Robert E.
Raleigh, NC
Cardiology

Gaskin, John S.
Albemarle, NC
Family Practice

Gibbs, Robert H.
Muskogee, OK
Internal Medicine

Gills, James P.
New Pt. Richy, FL
Ophthalmology

Glover, John S.
Charlotte, NC
Ob.-Gyn.

Capp, Ruth H.
Tucson, AZ
Psychiatry

Harrison, Courtn.
Va. Beach, VA
Endocrinology

Hayes, Charles P.
Jacksonville, FL
Nephrology

Hendry, Wilson S.
Sarasota, FL
Pathology

Winchester, Pat.
New York, NY
Ped. Radiology

Higgins, James T.
Rossford, OH
Internal Medicine

Hildebrandt, R.
Hershey, PA
Mat.-Fetal Med.

Hirschfeld, Robt.
Timonium, MD
Diagnostic Rad.

Hoffmann, James
Potomac, MD

Jacobs, Daniel M.
Fernandna Bch., FL
Internal Medicine

Kenan, Patrick D.
Durham, NC
Acad. Otolaryng.

Kuhns, James G.
Louisville, KY
Pathology

Lane, J. H.

Lindquist, Rich.
Morganton, NC
Ob.-Gyn.

Litch, Melvin
Germantown, TN
Ophthalmology

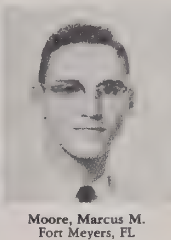
Mauney, Maxton
Asheville, NC
Cardiothor. Surg.

McCutcheon, E. P.
Columbia, SC
Research

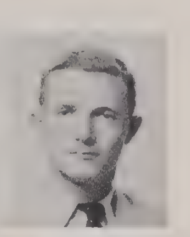
McFalls, Fred.
Burlington, NC

Mitchell, J. F.

Moles, Stanley
Harbor Bluffs, FL
Cardiology



Moore, Marcus M.
Fort Meyers, FL
Pediatrics



Mulholland, J. H.

Myers, Alonzo H.
Roanoke, VA

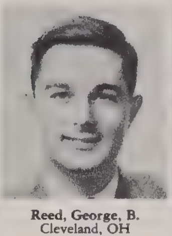
Nance, Charles L.
Wilmington, NC
Ortho. Surgery

Nesmith, Arthur
Gainesville, FL
Cardiothor. Surg.

Norton, Barry P.
Signal Mtn., TN

Nowlin, John B.
Durham, NC

Perlstein, R. N.



Reed, George, B.
Cleveland, OH
Ped. Pathology

Rippy, Wm. D.
Oakland, CA

Robbins, Thomas
Tampa, FL
Psychiatry

Rooker, Donald W.
Marietta, GA

Starr, Wilson C.
New York, NY

Tabari, Kambuzia
San Jose, CA
Cardiology

Takanaka, Y.

Thompson, Frank
Pasadena, CA
Ophthalmology

Tindall, John P.
Kissimmee, FL
Aero. Med.-Derm.

Tope, S. L. Jr.

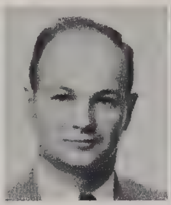
Tweed, Clyde, G.
Ormond Beach, FL
Neuro-Neurosurg.

Vieth, Roger G.
Chattanooga, TN
Neurosurgery

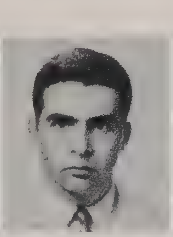
Wallace, Andrew G.
Durham, NC
Int. Med.-Card.

Wallace, Donald
South'n Pines, NC

West G. D.



Whatley, Joseph
Durham, NC



White, James F.
Columbia, SC
Otolaryngology

White, Thomas H.
Charlotte, NC
Ob.-Gyn.

Wilkinson, Harold
Wellesley, MA
Neurosurgery

Williams, McKim
Newport News, VA
Anesthesiology

Wood, Roy S.
Front Royal, VA
Pediatrics

ALSO GRADUATING
WITH THIS CLASS

Agre, Karl
Lincolnshire, IL
Pediatrics
Clemmons, Roy S.
Eglin, AFB, FL
Freundlich, I. M.
Tucson, AZ
Diagnostic Rad.

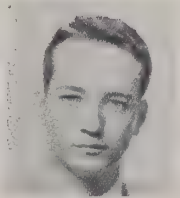
ALSO GRADUATING
WITH THIS CLASS

Freye, Henry B.
Stonington, CT
Allergy
Gregory, Miles C.
Roanoke Rpd, NC
Pediatrics
Johnston, Wm. W.
Durham, NC
Cytopathology

Yongue, Alfred H.
Greenville, NC
Psychiatry

ALSO GRADUATING
WITH THIS CLASS

Kohn, Ben
Beverly Hills, CA
Psychiatry
Mahaley, M. Steph
Pittsboro, NC
Neurosurgery



Young, David M.
Gainesville, FL

ALSO GRADUATING
WITH THIS CLASS

Mahler, Sara A.
Greenville, DE
Ped. Cardiology
Maron, Hermann F.
Griffin, GA
Morgenstern, Alan
Portland, OR
Psychiatry

ALSO GRADUATING
WITH THIS CLASS

Pence, James J.
Wilmington, NC
Ratner, Lillian
Great Neck, NY
Psych-Chld Psych
Small, Melvin D.
McLean, VA
Gastroenterology

When we first arrived at Duke, academic worries were not the first major considerations. The problem at hand was one of what to do with the huge blocks of ice placed daily in the urinal pits throughout the building. Some of us never fathomed their reason for being; however, many former athletes turned beer-drinkers or beer-drinkers turned philosophers strived to make form out of function by such methods as team drilling, team splitting and the occasional solo performance (to a standing ovation) of sculpting after the fashion of Henry Moore (which class was he in?).

Our first exposure to the camaraderie that was to exist between the faculty and students was the freshman beer and barbeque dinner at Josh Turnage's. When Dave Davison announced that he would be sitting at our table, a classmate, with ideas of grandeur concerning his drinking capacity and a whisper that would have been appropriate in a sawmill, announced that he would "drink the Dean under the table". Dean Davison overheard the challenge and established an early pace that was a marvel to all. In short order the student's head fell to the table where it remained for the rest of the evening, while the Dean enraptured those still erect with tales of Osler, England, and his experiences in the medical corps of some army, in some war, somewhere in Europe.

Duke obstetrical dictum in the 1950's maintained that doing cesarean sections was several notches below carnal sin. The glow of anticipated motherhood was sometimes extinguished by labors that were measured in days. The medical student's duty was to record that ordeal with notes on the progress of contractions and dilation, and of occasional utterances such as, "I'll never let that man on me again!" After one such 72-hour stint, a student entered the elevator on the fourth floor, more asleep than awake, followed by Dr. Bayard Carter, then Chairman of the Ob-Gyn Department. Dr. Carter was taking notice of the student's condition until the elevator stopped at the third floor to let on a past-forty, plump, powdered and rouged elegant lady who had been Dr. Carter's patient. They warmly exchanged pleasantries. As they exited on the first floor, he gave her a little love tap on her broad behind and said, "Let's get some of that goddam fat off." Throwing a flirtatious look at Dr. Carter, she rolled down the hall in the opposite direction proclaiming, "I'll try!"

Two senior students spent the last quarter building a remote control four-engine model plane. One week before graduation, a notice went up on the bulletin board announcing the date and time of the maiden flight. The engines roared; the take-off and ascent up over Duke Forest were just beautiful. The cheers and yelling were raucous. There was backslapping and congratulations and many a can of Tudor Beer (88 cents a six-pack at the A&P) was held high and up-ended in an almost continuous toast to success. By this time the plane was rapidly shrinking to the size of a speck. As the cheers died down, the control switch for turn was pushed and responded with a click; nothing happened. A series of frantic clicks followed, again with no responses. As the plane flew into oblivion, more beer was ordered.

Money, money, money. Was there ever enough of it for the medical student? Not for most of us, which led us to do dumb things, such as sign up for medical experiments with an informed consent usually consisting of one line stating, "Trust us. Everything will turn out just fine . . . we hope!" Donating blood was the safest, but for the more adventurous, there were cardiac caths while on tilt tables; a new drug from Switzerland which made colors brighter than they really were and did other strange things with the mind; sensory deprivation studies in the E.S.P. labs; etc. One classmate was overdosed with some sort of dye which stained his skin an artistic cyanotic color. Before desquamation and macrophages could bleach him back to flesh pink, he signed up to have a needle placed in his jugular bulb, a procedure which resulted in a bruised facial nerve. All of this occurred shortly before the big med school dance. He showed up medium grey in a black tuxedo with a sagging face, becoming the first classmate to look super-cool.

Then there was the pediatric resident with a pathologic sleep problem. He slept through most rounds and conferences, as well as most of his work. One evening, the students and house staff on Howland Ward wheeled a stretcher to his room in Baker House and transported the still sleeping body to Howland, hoping to embarrass him into action. His snoring increased during the ride, so Plan A became Plan B: his peaceful form was placed on the autopsy table in Pathology and covered with a sheet. The time of, and his reactions upon, awakening went unrecorded; however, at breakfast the next morning he was pale and shaking. A threat to do an L.P. while he was asleep was added to the above experience, but to no avail. One night he was rolled on his side, his back prepped, and a bandaid applied over the L4-5 interspace. An opened L.P. tray with three tubes of water were left on his bedside table. He of course knew it was all sham, but there were times when he wondered . . .

Most dormitory rooms resembled pig sties except for one. This room had drapes, paintings on the walls, an Oriental carpet on the floor, table and floor lamps, and a harpsichord. After class, evening concerts of Bach were performed with considerable artistic skill. On occasion, wine and cheese were served. Belching, nose-picking or flatulence resulted in one's name being removed from the guest list. I thoroughly enjoyed the one concert I attended.

One final memory. A student or house officer — I forget which — was very talented with words. One enviable favorite was:

Breeze
Weeds
Trees
Wheeze
Sneeze
Dees
Fees
Please.

George Engstrom, M.D. '58

ENTERING CLASS OF 1956

Baker, Linny M.
Concord, NC
Pediatrics

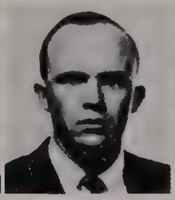
Bird, W. P.

Bradshaw, Preston
Raleigh, NC

Brice, Robert S.
Winston-Salem, NC
Gastroenterology

Brickman, T.

Brumley, George
Durham, NC
Pediatrics



Campell, Henry S.
Martinsville, VA
Ophthalmology

Cassells, Joseph
Chester, SC

Chamblee, Royster
Raleigh, NC
Ophthalmology

Chapman, W.E.

Collins, Stuart
Winston-Salem, NC
Psychiatry

Cooper, Wm. C.
Rocky Mount, NC
Pediatrics

Cousar, George R.
Greenville, SC
Ophthalmology

Crymes, James E.
Miami, FL
Diagnostic Rad.

Dalton, Frank P.
Durham, NC

Davis, James K.
Newport News, VA
Radiology

Denby, John L.
Springfield, IL
Gen. & Vas. Surg.

Dobbs, Charles E.
Louisville, KY
Hem.-Onc

Duvoisin, Peter
Chattanooga, TN

Dyke, Peter C.
Redlands, CA
Pathology

Dye, M. Elaine
Hershey, PA
Int. Med.-Hem.

Fischer, Robert
Ft. L'dale, FL
Dermatology

Fore, William W.
Greenville, NC
Int. & Nuc. Med.

Fort, Lynn III
Charlotte, NC
Gen. & Thor. Sur.

Garcia-trias, E.
Hato Rey, PR

Glassock, R. J.

Goode, G. Browne
Ross, CA
Neurology

Green, Robert
Palm Beach, FL
Orthopaedic Surg.

Grode, Harvey E.
Wilson, NC
Internal Medicine

Hubbard, Wm. H.
Palm Harbor, FL
Family Practice

Huggin, P. J.

Le Bauer, Joseph
Greensboro, NC
Cardiology

Lee, James F.
San Antonio, TX
Neurosurgery

Lewis, Andrew M.
Leesburg, VA

Lodmell, John G.
Ashton, MD
Internal Medicine

Lowe, J. S.

Malone, John Hugh
Concord, NC
Internal Medicine

Martin, Arthur M.
Danville, VA

Massie, Francis
Richmond, VA
All. & Clin. Imm

Mayer, W. Brem
Atlanta, GA
Neurology

McLeod, Alexander
Nashville, TN
Internal Medicine

McLeod, Michael
Durham, NC
Int. Med.-GE

Menefee, W. P.

Meriney, David K.
Up. Montclair, NJ
All. & Clin. Imm

Merrell, Robert
Daytona Beach, FL

Opdyke, John L.
Los Angeles, CA

O'Shaughnessy, P.

Parkerson, Walter
Charlotte, NC
Ophthalmology

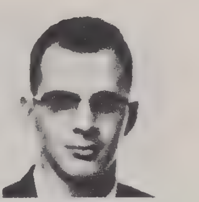
Parrott, Lawrence
Camden, SC
Pathology

Pearce, Philip
Durham, NC
Ob.-Gyn.

Pilliod, James P.
Laconia, NH
Pediatrics

Preston, Edwin T.
Chapel Hill, NC
Orthopaedic Surg.

Price, Grady E.
Charlotte, NC
Orthopaedic Surg


Reece, Richard
Minneapolis, MN
Pathology

Richardson, Chas.
Chestnut Hill, MA
Biochem. Res.

Riggins, Richard
Davis, CA
Orthopaedic Surg.

Rineberg, Bernard
New Brunswick, NJ
Orthopaedic Surg.

Robertson, Lloyd
Salisbury, NC
Urology

Rockwell, Kenneth
Durham, NC
Psychiatry

Sadler, John H.
Baltimore, MD
Int. Med.-Neph.

Scarpelli, Emile
Orangeburg, NY
Pediatric Pulm.

Schwarz, George
Jacksonville, FL
Psych.-Child Psy

Seabury, James C.
Paducah, KY
Urology

Smith, Donald D.
Greensboro, NC
Pediatrics

Smith, Edward H.
Augusta, GA
Dermatology

Stuart, Frank A.
Ft. L'dale, Fl
Orthopaedic Surg.

Triggiani, L. V.

Tully, Harry T.
San Leandro, CA
Anesthesiology

Vause, David D.
Blanco, TX

Walker, Joseph E.
Shelby, NC
Family Practice

Walker, Lawrence
Winston-Salem, NC

Weber, Carl H.
Helotes. TX
Urology

ALSO GRADUATING WITH THIS CLASS

Addison, Winnif.
Hillsborough, NC
Ob.-Gyn.

Blount, Robert E.
APO New York, NY

Brownstein, Burt.
Brooklyn, NY

ALSO GRADUATING WITH THIS CLASS

Dyke, Perry H.
Redlands, CA
Pediatrics

Ein, Zack, A.
Pal Verd Est, CA
Family Practice

Feder, Robert J.
Beverly Hills, CA

Westfall, Lake Jr.
Fricksburg, VA

Weston, William
Augusta, GA
Pediatrics

Woodward, S. E.

Young, Sanford
Oxon Hill, MD

ALSO GRADUATING WITH THIS CLASS

Gerber, Edward M.
Lexington, MA

Porro, Robert
Miami, FL

Reed, John M.
Sacramento, CA

ALSO GRADUATING WITH THIS CLASS

Sandberg, Seymour
New York, NY
Pl. & Recon. Sur.

Shalit, Allen
Wayne, NY
Int. Med.-Card.

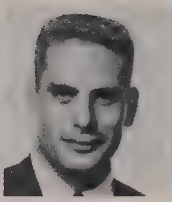
Worton, Stanley
Miami Beach, FL
Radiology

ENTERING CLASS OF 1957

Agre, Fred, A.
Scarsdale, NY

Alanis, Joseph M.
Englewood, CO
Anesthesiology

Atkinson, Samuel
Ft. Walton B., FL
Ob.-Gyn.


Banton, Thomas J.
St. Louis, MO
Orthopaedic Surg.

Behar, Victor S.
Durham, NC
Cardiology

Brown, John W.
Columbia, SC
Thoracic Surgery

Butler, Frederick
Fayetteville, NC
Ophthalmology

Campbell, Milton
Greenwich, CT
Ophthalmology

Conant, Marcus A.
San Fran., CA
Dermatology

Constantine, S.
Bakersfield, CA
Dermatology

Corwin, Robert F.
Waco, TX
Urology

Cox, Ronnie L.
High Point, NC
Int. Med.-Card.

Crane, James D.
Jacksonville, FL

Deas, David J.
Gastonia, NC
Psychiatry

Dellinger, Clyde
Drexel, NC
Family Practice

El-Ramey, Thomas
Pompano Beach, FL
Neurology

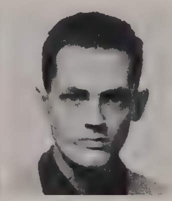
Farris, R. Linsy
Tenafly, NJ
Ophthalmology

Feagin, John A.
Teton Village, WY
Orthopaedic Surg.

Flanagan, Latham
Eugene, OR
Gen. & Vas. Surg.

Gay, William A.
Larchmont, NY
Surgery

Goodwin, Ernest
Canton, NC
Family Practice


Greenlee, L.

Groff, Diller B.
Louisville, KY
Pediatric Surg.

Guynn, Cyrus H.
Fairfax St., VA
Internal Medicine

Hall, Warner L.
Raleigh, NC
Ob.-Gyn.

Hammond, Charles
Durham, NC
Ob.-Gyn.

Harp, James R.
Bala Cynwyd, PA
Anesthesiology

Harrington, Rand.
Reston, VA

Hodosh, S.

Huneycutt, Harry
Reno, NV
Ob-Gyn.

Jervey, Edward D.
Greenville, SC

Johnson, Taylor
Rockville, MD
Dermatology

Jones, Edward M.
Port Wash., NY

Jordan, Lyndon K.
Smithfield, NC
Family Practice

Kistler, Henry
Seneca, SC
Ob.-Gyn.

Lapolla, James J.
Warren, OH

Lassiter, Ken. R.
Charlotte, NC
Neurosurgery

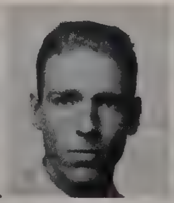
Lazenby, G. Wm.
Holiday, FL
Ophthalmology

Levy, Bernard S.
Newton Centre, MA

Lybass, Tilling
N. Palm Beach, FL

Lyon, George M.
Bahama, NC
Ped. Hem.

Massey, Charles
Charlotte, NC
Col. & Rec. Surg.


Matthews, Hubert
Montgomery, AL

Mattison, Joel
Tampa, FL
Plastic Surgery

McDonald, William
Monticello, FL

McLain, L. Wm.
Minneapolis, MN
Neurology

McTammany, Rob.
Reading, PA
Ob.-Gyn.

Merlo, Richard B.
Elkin, NC
Radiology

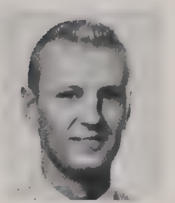
Metz, Earl Nelson
Worthington, OH
Int. Med.-Hem.

Mullen, Donald C.
Milwaukee, WI
Thor. & Card. Sur.

Nye, Mary Jane
Durham, NC
Pediatrics

Paul, Ronlad E.
Lake Jackson, TX

Payne, J.


Peter, Robert H.
Durham, NC
Cardiology

Pitkethly, David
Kirkland, WA
Neurosurgery

Vartanian, Vartan
Durham, NC
Anesthesiology

Poole, Tilghman
Wilmington, NC
Ophthalmology

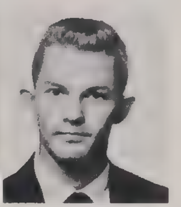
Powell, Edward
Burlington, NC

Price, Dudley R.
Stanley, VA

Ray, Ritz C., Jr.
Lewisville, NC
Child Psychiatry

Rider, Robert E.
Martinsville, VA
Pediatrics

Riley, R.


Roberson, Clive
W. Palm Beach, FL
Pediatric All.

Schmickel, Roy
Ann Arbor, MI
Ped. Genetics

Schwartz, Stephen
Valhalla, NY
Orthopaedic Sur.

Smith, Wm. S.
Greensboro, NC
Ob.-Gyn.

Starling, Kenneth
Houston, TX

Summerlin, Harry
Asheville, NC
Family Practice

Sweat, R. Earle
Santa Rosa, CA
Gen. & Vas. Surg.

Trant, John H.
Va. Beach, VA

Trantham, Harry
Greenville, SC
Ophthalmology

Tripp, Gordon A.
Bethesda, MD

ALSO GRADUATING WITH THIS CLASS

Dixon, Henry B.
Franktown, VA
Int. Med.-Card.

Noyes, Philip P.
San Leandro, CA

Thompson, Lawr.
Durham, NC

Turman, M.

Uprichard, E.

Walton, David S.
Marblehead, MA
Pediatric Ophth.

Warshaw, Joseph
Guilford, CT
Pediatrics

Wilemon, Wm. K.
Rlng Hls Est, CA

Young, Robert L.
Lumberton, NC
Pediatrics

Yowell, Robert K.
Durham, NC
Ob.-Gyn.

Dean Davison and the "Assistant Dean", Carl Rogers

Dave Sime, ca. 1960

ENTERING CLASS
OF 1958

Alexander, J.

Armstrong, George
Columbus, GA
Ped. Card.

Baez-garcia, J. E.
Hato Rey, PR

Baumann, John A.
Santa Barbara, CA
Sports Medicine

Baxley, Wm. A.
Birmingham, AL
Cardiology

BeMiller, David
Tacoma, WA
Ob.-Gyn.

Bicknell, W.

Henry, Suzanne B.
Columbia, MO

Carter, Alan B.
Raleigh, NC
Child & Adult Psy.

Carter, Charles
Santa Rosa, CA
Radiology

Caskey, Thomas
Houston, TX

Cauthen, Joseph
Gainesville, FL
Neurosurgery

Coble, Yank D.
Atlantic Bch, FL
Endocrinology

Colston, Wm. C.
Morristown, NJ
Diagnostic Rad.

Colvin, Charles
Birmingham, AL

Conna, Sherrill
Westborough, MA
Child Psychiatry

Craven, N. Scott
Lexington, NC
Psychiatry

Croft, Carl Louis
Winter Park, FL
Orthopaedic Surg.

Davis, Robert N.
Greensboro, NC
Dermatology

Dudley, Alden
Semmes, AL
Neuropathology

Erisman, F.

Farmer, Joseph C.
Durham, NC
Otolaryngology

Farmer, Raymond
Anderson, SC
Ob.-Gyn.

Fortescue, Wm. N.
Hendersonv'le, NC
Management Cons.

Foster, J. Thomas
Hickory, NC
Ophthalmology

Frank, Donald H.
Essex Falls, NJ
Neurosurgery

Gebel, Emile L.
Shelby, NC
Ophthalmology

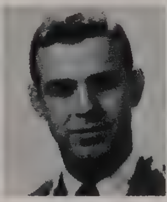
Gilbert, Joel H.
Miami, FL
Radiology

Gilbert, Walter
Jacksonville, FL
Ophthalmology

Ginn, Fred L.
Fayetteville, NC
Pathology

Gonzalez, Antonio
Atlanta, GA

Grant, Robert N.
San Angelo, TX
Vascular Surgery


Hatcher, Martin
Greensboro, NC
Neurology

Holloway, Rufus
Orlando, FL
Otolaryngology

Jolls, K.

Jones, Danny B.
Houston, TX
Ophthalmology

On a September afternoon in 1958, the future Class of 1962 gathered for the first time at the baseball field for a beer party given by Dean Davison. Many were young; some were experienced. One was female; the remaining 75 were male. With introductions over, the group became a class and quickly became enmeshed in the intense educational experience of the freshman year.

Who can forget the dimly lit room, M110, where Dr. Markee's movies ran non-stop? "The gluteus maximus is demonstrated and then cut and reflected. The inferior gluteal nerve is shown, and the inferior gluteal artery is indicated." After sessions in the anatomy lab, those who chose to eat in the MGC cafeteria were asked to sit in the back corner because of the odor of formaldehyde.

Histology was kept surprisingly entertaining as well as informative by Dr. Hetherington, with such remarks as, "Surely you believe in the Little Green People!" Later we learned to separate spinothalamic tracts from spinocerebellar tracts under the capable tutelage of Dr. Peele. By the end of the first six months, our vocabularies had been expanded by some seven thousand words, most of which have been forgotten as the years have passed. In biochemistry, the Krebs cycle became a part of our lives, and Dr. Handler, always impeccably attired, stunned us with his understanding of the complexities of body chemistry.

Some of us were introduced to heavy snow in the Winter of 1958-9, and all of us discovered cabin parties. Many of the class resided in MGC, where the favorite pastime was girl watching; other favorite pastimes were arguing with the law students or sipping a beer at the Rebel Drive-In. The married contingent lived in the Poplar Apartments, appropriately known as "Rabbit Hill".

The Class of 1962 was the last to know and admire Dr. Forbus as Chairman of the Department of Pathology. There were "round-ups" in the second floor classroom, and CPC's in the old amphitheater. The Saturday morning duels between one of the distinguished clinicians and Dr. Forbus on the floor of the amphitheater provided an intense and exciting educational experience.

Kahn, Kenneth J.
Largo, FL
Neurology

Klite, Paul Don
Denver, CO

Kramer, Richard
Durham, NC
Neurosurgery

Lunas, J. Paul
Sitka, AK
Internal Medicine

Magendantz, Henry
Lincoln, RI
Ob.-Gyn

Maloney, Eugen
Morehead Cy, NC
Psychiatry

Martin, Herbert
DuBuque, IA
Card. Surg.

Massey, Wm. J.
Williamsburg, VA
Internal Medicine

McFadden, Don C.
Mt. Sterling, KY

Morgan, Calvin V.
Johnson City, TN

Morgan, John G.
Metairie, LA

Moriber, Lloyd A.
Miami, FL
Orthopaedic Surg.

Morris, James C.

Morrison, Sidney
Hollywood, FL

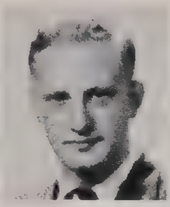
Nicks, Frank I.
Col. Springs, CO
Ob.-Gyn.

Norins, Leslie C.
Atlanta, GA
Med. Publication

Orman, Benjamin
Houston, TX
Int. Med.-Pulm.

Price, William F.
Spartanburg, SC
Internal Medicine

Ratliff, Norman
Minneapolis, MN


Raynor, J.

Romhilt, Donald
Richmond, VA
Cardiology

Rubin, M.

Satterfield, Ben.
Raleigh, NC
Ob-Gyn.

Schiff, Martin
Orange, CT

Shearin, Wm. A.
Raleigh, NC
Ophthalmology

Sime, David W.
Key Biscayne, FL

Stone, Richard C.
Dallas, TX
Internal Medicine

Stowe, Deryl G.
Spartanburg, SC

Strother, Kemp
Dallas, TX
Ob.-Gyn.

Taylor, Dean R.
Baltimore, MD

Terry, Lewis N.
Greenville, SC
Radiation Onc.

Turner, Leonard
Atlanta, GA
Int. Med.-Neph.

Urbaniak, James
Durham, NC
Orthopaedics

Victor, Martin I.
Homestead AFB, FL
Family Practice

Waddell, Wm. B!
Galax, VA
Family Practice

Warden, Wm. S.
Melbourne, FL
Urologic Surg

ALSO GRADUATING
WITH THIS CLASS
Kingsley, David
Edison, NJ
Rad.-Nuc. Med.

ALSO GRADUATING
WITH THIS CLASS
Logue, Patrick J.
Clearwater, FL
Orthopaedic Surg.
Mejo, Robert W.
Longview, WA
Psychiatry
Moskowitz, Norman

Weems, Wade S.
Ft. L'dale, FL
Urology

Weiser, Joel J.
New City, NY
Orthopaedic Surg.

Wilkinson, Tol.
San Antonio, TX
Plastic Surgery

Williams, Gail R.
Jackson, MI
Psychiatry

Woods, Charles A.
Fairfield, CT
Pediatrics

ALSO GRADUATING
WITH THIS CLASS
Purcell, Robert
Boyds, MD
Hepatitis Res.
Ralph, James W.
Goldsboro, NC
Riddick, Joseph
Charlotte, NC
Pathology

ALSO GRADUATING
WITH THIS CLASS
Short, Marvin J.
Greenville, SC
Psychiatry

We were introduced to tuberculin skin tests and BCG vaccines by Dr. D.T. Smith, and Dr. Conant presented the fascinating world of fungi. When the early Spring of 1960 arrived, Physical Diagnosis began, and for the first time we students started to feel in a small way like physicians. How impressive it was to palpate livers, auscultate heart sounds, and visualize fungi for the first time. One member of the class gave a clear-cut description of a V.A. patient's heart sounds while standing with one foot in a bedpan and the earpieces of his stethoscope still on his neck.

The clinical years passed swiftly, and the tightly organized curriculum left time only for one eight-week elective. There were long hours on OB spent sitting with "pit drips". The time on Medicine was divided between the MOPC, Osler Ward and the V.A., but everyone had the privilege of an oral exam by Dr. Stead and colleagues at the end of the course. Pediatrics was still housed on the old Howland Ward; some will recall making ice cream in a donated, hand-cranked churn using Similac and crushed peppermint sticks. In Surgery, we were given the basics in general surgery at the V.A. and on Long Ward, and then introduced to the surgical sub-specialties. Dr. Hohman and Dr. Lowenbach guided us through Psychiatry, and taught some class members how to avoid advances from sociopathic female patients.

By 1962, most of the class was married, and the noontime "Brown Bag Club" had outgrown the student lounge. The Duke Gardens provided a perfect place for the brown baggers to lunch while feeding the ducks and soaking up sunshine. There were long nights on call, but there was still time left for short weekend trips to Morehead, Wrightsville, and Nag's Head. When Graduation Day arrived and we donned the academic gowns trimmed with green, it hardly seemed that four years had passed. We had received the finest possible training in medicine and were again embarking on a new beginning.

George Armstrong, M.D. '62

ENTERING CLASS
OF 1959

Ayers, Charles R.
Miramonte, CA

Banghart, Harry
San Francisco, CA

Banta, H. David
Washington, DC
Preventive Med.

Beamer, Yancey B.
Tustin, CA
Neurosurgery

Berne, Freeman A.
Lumberton, NC
Diagnostic Rad.

Black, Craig G.
Tustin, CA
Psych. & Neuro.

Bolton, John C.
Mill Valley, CA
Pediatrics

Boone, Stephen C.
Pittsboro, NC

Broughton, Joseph
Denver, CO
Pulmonary Ds.

Byrnes, Thomas H.
Thomasville, NC
Internal Medicine

Carlton, Thomas
Salisbury, NC
Pediatrics

Carter, James A.
Atlanta, GA
Otolaryngology

Carter, Wm. A.
Springville, NY

Chang, Wallace H.
Shrewsbury, MA
Plastic Surgery

Church, Franklin
Raleigh, NC
Family Practice

Cline, Robert E.
Ft. L'dale, FL
Cardiovasc. Surg.

Durrett, Robert
Houston, TX

Edwards, Stephen
Raleigh, NC
Pediatrics

Emery, John B.
Lake Oswego, OR
Internal Medicine

Entman, Mark L.
Houston, TX
Cardiology

Epstein, Martin

Farrell, James B.
Albuquerque, NM
Rheumatology

Fortney, Sidney
Concord, NC
Int. Med.-Endo.

Glaser, Joel S.
Miami, FL
Neuro.-Ophth.

Goldston, Wm. R.
Raleigh, NC
Ob.-Gyn.

Graham, Thomas P.
Nashville, TN
Ped. Cardiology

Grant, George R.
Raleigh, NC
Internal Medicine

Gunlock, Howard
Washington, DC

Harrison, Brent
Charlotv'le, VA
Radiology

Haslett, Nancy R.
New Orleans, LA
Child Psy. & Neu.

Haworth, Chester
High Point, NC
Int. Med.-Neur.

Hogan, Leo

Holland, Warren
Columbia, SC
Cardiology

Holmes, Lewis B.
Wellesley, MA

Hull, William M.
Rock Hill, SC
Ophthalmology

Hutchinson, W. IV
Jacksonville, FL
Radiology

Hyman, Barry N.
Houston, TX
Ophthalmology

Imperato, Pascal

James, Charles M.
Richmond, VA

Jones, Jerry L.
Modesto, CA
Orthopaedic Surg.

Jones, Kenneth L.
San Diego, CA
Ped. Endo.

Kapp, John P.
Panama City, FL
Neurosurgery

Kohler, Peter O.
Little Roack, AR
Internal Medicine

Kroe, Donald J.
Jonesboro, AR

Langer, Guy

Lewis, Edward L.
Athens, GA
Dermatology

Long, Eugene M.
Burlington, NC
Ob.-Gyn.

Lucey, Donald T.
Raleigh, NC

Marcus, Elliot L.
Huntsville, AL
Internal Medicine

Markham, R. Wade
High Point, NC
Dermatology

Martin, Charles
Jacksonville, NC
Pediatrics

Mayson, James S.
Newport Beach, CA

McBryde, Angus, M.
Charlotte, NC
Orthopaedic Surg.

McLaughlin, J. Jr.

McMillan, Wm. O.
Charleston, WV
Gastroenterology

Moore, Lawrence
Chapel Hill, NC

Oliva, Philip B.
Littleton, CO
Cardiology

Poindexter, John
Richmond, VA

Pollard, Dulon D.
Smithfield, NC
Psychiatry

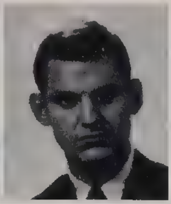
Porter, John M.
Portland, OR
Vascular Surgery

Redding, James O.
Boyds, MD

Robinson, Norman
Wilmington, NC
Cardiology

Robison, Michael

Runyan, Thomas E.
Belton, TX
Ophthalmology


Safrit, Henry F.
San Francisco, CA
Endocrinology

Saint-Amand, N.E.
New York, NY
Allergy

Sewell, Frank K.
Liverpool

Shimm, Stephen J.
Mill Valley, CA

Sproles, Elijah
New Orleans, LA

Stoever, Henry

Tabor, Owen B.
Memphis, TN

Taylor, Walter L.
Va. Beach, VA
Ophthalmology

ALSO GRADUATING
WITH THIS CLASS

Bicknell, Wm. J.
Marshfield, MA
Public Health

Doyle, Robert A.
Hillsboro Bch, FL

ALSO GRADUATING
WITH THIS CLASS

Driver, Doyle
APO New York, NY

Gabor, Andrew J.
Davis, CA
Neurology

Hoffman, Edward
Olympia, WA
Neurosurgery

Thomas, Raymond
Florence, SC
Radiology

Vanderbeek, Rand.
Asheville, NC
Urology

Walston, Abe II
Durham, NC
Cardiology

Young, Noel W.
Durham, NC
Ophthalmology

Zahler, Charles

ALSO GRADUATING
WITH THIS CLASS

James, Everett
Nashville, TN
Radiology-US

Jones, Paul W.
Eugene, OR
Neurology

Kramer, Arnold
Wilkes Barre, PA
Pediatrics

ALSO GRADUATING
WITH THIS CLASS

Mannarino, Eman.
Chevy Chase, MD

Stumpf, Karl J.
Quincy, IL

ENTERING CLASS OF 1960

Alexander, Raym.
Gainesville, FL

Allen, Benjamin
Galveston, TX

Amstey, Marvin
Rochester, NY
Ob.-Gyn.

Anderson, Page A.
Durham, NC
Ped. Cardiology

Barber, Sidman
Short Hills, NJ
Child Psychiatry

Barnett, Crawford
Atlanta, GA
Internal Medicine

Bell, Willis H.
Durham, NC
Internal Medicine

Bremer, Chris.
Kinston, NC
Family Practice

Carruth, James W.
S Trail, Fl

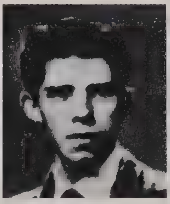
Chase, N. Bruce
Fairfax, VA
Aerospace Med.

Cottingham, A.
Aurora, CO
Ophthalmology

Crummie, Robert
Fayetteville, NC
Psychiatry

Dobson, John L.
Va. Beach, VA
Orthopaedic Surg.

Drury, Robert W.
Glastonbury, CT
Internal Medicine


Dubin, David B.
Labanon, PA

Friedel, Robert
Midlothian, VA
Psychiatry

Gaines, J. T.

Given, Kenna S.
Augusta, GA
Plastic Surgery

Goldman, Herbert
Los Angeles, CA
Psychiatry

Goldman, Ronald S.
Los Angeles, CA
Psychiatry

Gooding, Ronald S.
APO New York, NY

Green, James L.
Columbia, SC

Grover, Frederick
San Antonio, TX
Cardiovasc. Surg.

Hall, John H.
Greensboro, NC
Dermatology

Hannah, Frank T.
Shelby, NC
Ophthalmology

Harrelson, John
Bahama, NC
Orthopaedic Surg.

Harris, B.S.H.

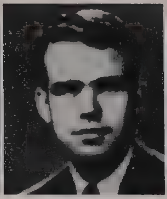
Harris, Lee S.
Sarasota, FL
Internal Medicine

Hart, J. Deryl
Powell River
Internal Medicine

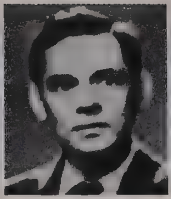
Herring, James
Geneva, NY
Ophthalmology

Holsinger, James
Augusta, GA
Cardiology

Jacobson, Lenard
New York, NY
Urology


Kann, Herbert E.
Decatur, GA
Hem.-Onc.

Karickhoff, John
Fairfax, VA
Ophthalmology


Keranen, Victor
Fayetteville, NC
Neurosurgery

Keys, David N.
Roanoke, VA
Otolaryngology

Kornreich, George
Houston, TX
Otolaryngology

Lanning, Joseph
Cambridge, MA

Lazarus, Stephen
Queens, NY
Urology

Lewis, Kay R.
Rosenberg, TX
Ped.-Child Dev.

Liakos, Wm. G.
Roswell, NM
Pediatrics

Lively, Edmund P.
Columbus, NE
Ophthalmology

Martin, David W.
Mill Valley, CA
Medical Genetics

McCutchan, Arthur
Quinby, SC
Ophthalmology

McGraw, Ralph
Chattanooga, TN
Neurosurgery

Nash, Martin A.
Pelham Manor, NY
Ped. Nephrology

Nickman, Steven
Brookline, MA
Child Psychiatry

Noble, Robert C.
Lexington, KY
Infectious DS.

Paulson, David F.
Durham, NC
Urology

Powell, James B.
Burlington, NC
Pathology

Price, Thomas B.
Greensboro, NC

Ravenel, DuBose
Greensboro, NC
Pediatrics

Ruben, Frederick
Pittsburgh, PA
Infectious Ds.

Rubenstein, Carl
Okl. City, OK
Cardiovasc. Surg.

Ruffner, Winfred
Signal Mtn., TN
Medical Oncology

Rutledge, J. H.

Schmitz, George
San Antonio, TX
Child Psychiatry

Scott, William
Pensacola, FL

Serafin, Donald
Durham, NC
Plastic Surgery

Shields, Ralph
Bethlehem, PA

Shiner, Philip T.
Roanoke, VA
Cardiology

Slaughter, Donald
Ruxton, MD
Neurosurgery

Springer, Leonard
Calabasas Pk, CA
Dermatology

Steer, Michael
Newton Center, MA
Gen. & Vasc. Sur.

Straub, K. David
Little Rock, AR

Strause, Philip
Wayland, MA
Pediatrics

Tankel, Robert H.
Flushing, NY
Dermatology

Totten, Larry K.
Spartanburg, SC

Turner, James W.
Oakton, VA
Internal Medicine

Vernon, Charles
Columbia, SC
Cardiology

Virgin, Charles
Miami, FL
Orthopaedics

Waters, Y. N.

ALSO GRADUATING
WITH THIS CLASS

Baxley, Wm. W.
Macon, GA
Otolaryngology

Eisdorfer, Carl
Seattle, WA
Psychiatry

Fronstin, Michael
Ormond Beach, FL
Pathology

ALSO GRADUATING
WITH THIS CLASS

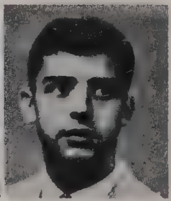
Gorenberg, Rich.
Gainesville, FL
Gynecology

Hecht, Manfred H.
APO Miami, FL
Orthopaedic Surg.

Hinshaw, Arned
Durham, NC
Ob.-Gyn.

Wilson, Thomas
Kettering, Oh
Ob.-Gyn.

Winter, Robert H.
Westfld. Ctr. OH
Radiology


Wolk, Michael L.
Aptos, CA

ALSO GRADUATING
WITH THIS CLASS

Hyde, Howard P.
Scottsdale, AZ
Flight Med.-USAF

Johnson, Charles
Sarasota, FL
Gen. & Thor. Sur.

Mathews, Robert
Lancaster, PA
Orthopaedic Surg.

ALSO GRADUATING
WITH THIS CLASS

Larimer, Alan M.
Olean, NY
Orthopaedic Surg.

LaRosa, John J.
Indiatantic, FL
Thoracic Surgery

Reed, Ronald C.
Borhell, WA
Family Practice

ALSO GRADUATING
WITH THIS CLASS

Roberts, Stuart
Stuart, FL
Pathology

Roe, Charles R.
Durham, NC

Arluk, Irwin
Long Beach, CA

ENTERING CLASS OF 1961

Andriola, Michael
Clearwater, FL
Neurology

Baker, Bernie B.
Edenton, NC

Barbee, John Y.
New Albany, IN

Bender, Wm. R.
Pensacola, FL
Radiology

Bossen, Edward H.
Durham, NC
Pathology

Butcher, Gene A.
Youngstown, OH
Internal Medicine

Butcher, Suzanne
Youngstown, OH
Pathology

Clancy, Thomas P.
Palo Alto, CA

Coville, Fred.
Denver, CO
Ortho. Surgery

Crawford, Robert
High Point, NC
Ob.-Gyn.

Dirkers, Jerome
Sylva, NC

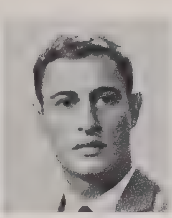
Donovan, Lawrence
Esterville, IA

Dunlap, WM. M.
Raleigh, NC
Hem.-Onc.

Emlet, John L.
Pensacola, FL
General Surgery

Fagin, Ronald R.
Savannah, GA
Int. Med.-G.E.

Flint, Lewis M.
Prospect, KY
General Surgery



Frank, Lawrence
Durham, NC
Ortho. Surgery

Gerber, Frederic
La Jolla, CA

Gold, Herman K.
Boston, MA
Cardiology

Graybeal, Fred.
Ft. Worth, TX
Anat.-Clin. Path.

Green, J. E.

Gross, Richard H.
Edmond, OK
Ortho. Surgery

Guazzo, Eugene
Maddox, MD
Family Practice

Hall, Snowden C.
Rockville, VA
Int. Med.-G.E.

Harner, Russell
Greenville, SC
Opthalmology

Haslam, John B.
Clendenin, WV
Radiation Oncol.

Hasson, John E.
Portola Vally, CA

Hawkins, David M.
Durham, NC
Pathology

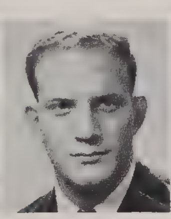
Hoyle, Thos. C.
Col. Springs, CO
Ophthalmology

Katz, Richard I.
Philadelphia, PA

Kay, E. Daniel
Chesapeake, VA
Psychiatry

Kreuger, Ronald
Jackson, MS
Pediatric Urology

Kulvin, Stephen
Miami, FL
Ophthalmology

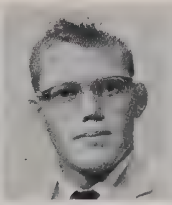


LeBauer, Eugene
Greensboro, NC
Pulmonary Allergy

Linnemann, Calvin
Cincinnati, OH
Internal Medicine

Lucas, Bruce, A.
Lexington, KY
Urol.-Renal Trans

Markee, J. E. Jr.
Yakima, WA
Ob.-Gyn.



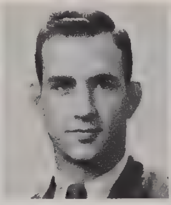
Maynard, David R.
Greensboro, NC
Anesthesiology

McArtor, Robert

McCracken, Dean
Sam Houston, TX
Medical Oncology

McGregor, Frank
Independence, LA

Minus, Joseph S.
Shelby, NC



Moorman, Claude
Savannah, GA
Anesth.-Legal Med

O'Quinn, Aglaia
Raleigh, NC
Pediatrics

Nuckolls, James
Galax, VA
Internal Medicine

Odom, Guy L. Jr.
Rutherfordton, NC
Surgery

Oken, Martin M.
Minneapolis, MN
Hem.-Onc.

Powell, John G.
Lynchburg, VA
Pediatrics

Price, Andrew R.
Wilson, NC
Internal Medicine

Ramming, Kenneth
Santa Monica, CA
Surgical Oncology

Reitt, J. Peter
Atlanta, GA
Neurosurgery

Riley, Charles P.
Pensacola, FL
Cardiology

Rogers, Larry A.
Charlotte, NC
Neurosurgery

Rouse, James B.
Durham, NC
Pediatrics

Sanford, Edgar
Elmira, NY

Saputo, Leonard
Orinda, CA

Scheidt, Peter
Highland, MD
Pediatrics

Scott, Neil R.
San Francisco, CA
Psychiatry

Zirkle, Sara K.
Richland, WA
Pediatrics

Shore, James H.
Portland, OR

Shultz, Kirkwood
Charlotte, NC

Spencer, Wm.
Houston, TX
Cardiology

Sternbergh, W. C.
Chattanooga, TN
Neurosurgery

Stewart, H. Lee

Stone, Benjamin
New Bern, NC
Otolaryngology

Sullivan, Thomas
Knoxville, TN
Pulmonary Med.

Sulzycki, J.J.

Taylor, Jack B.
Norfolk, VA

Taylor, Kenneth
San Diego, CA
Family Practice

Wagner, Galen S.
Durham, NC
Cardiology

Watson, C. N.

Weeks, John W.
Sarasota, FL
Ob.-Gyn.

ALSO GRADUATING
WITH THIS CLASS

Andriola, Mary T.
Clearwater, FL
Ped. Neurology

Bigner, Darell
Durham, NC
Pathology

Cancellaro, Louis
Johnson City, TN
Psychiatry

Williams, Jack
Shelby, NC
Otolaryngology

Wright, Creighton
Iowa City, IA
Cardiothor. Surg.

ALSO GRAUDTING
WITH THIS CLASS

Cavallaro, Arthur
Vallejo, CA
Otolar.-Plas. Sur.

Di Croce, Anthony
Plsnt Beach, NJ
Family Practice

Gray, Betty S.
Thomasville, GA

Yancey, W. Samuel
Durham, NC
Pediatrics

Zaepfel, Joseph
Lancaster, PA
Otolaryngology

ALSO GRADUATING
WITH THIS CLASS

Salz, James J.
Los Angeles, CA
Ophthalmology

Schwam, Wallace J.
Pismo Beach, CA

Venetta, Benjamin
Copley, OH
Family Practice

ENTERING CLASS OF 1962

Adler, Charles S
Denver, CO
Psychiarty

Alexander, James
Gainesville, FL

Allen, B. Titus
Durham, NC
Int. Med. — Endo.

Allen, David W.
La Grande, OR
Internist

Allen, Kenneth
Prospect, KY
Radiology

Appen, Richard
Madison, WI
Ophthalmology

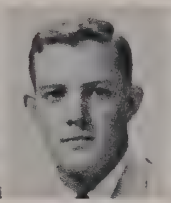
Ballentine, R.M.
Honesdale, PA
Homeopathy

Bechtel, Richard
Green Bay, WI
Ob-Gyn

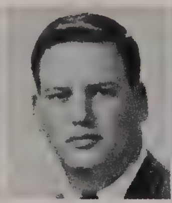
Berry, Peter E.
Griffin, GA

Bland, Wiley R.
Billings, MT
Radiology

Borden, Ernest C.
Madison, WI
Medical Oncology



Bradford, John
Missoula, MT
Anesthesia



Brian, Earl W.
Pasadena, CA

Brown, Robert G.
Opelika, AL
Plas. & Recon. Surg.

Burk, Peter G.
Bronx, NY

Carr, William A.
Beaverton, OR

Clark, Joe L.
Lynchburg, VA

Cooper, Edwin B.
Kinston, NC
Orthopaedic Surg.

Crook, John N.
Concord, NC
Gen. & Vasc. Surg.

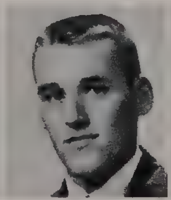
Culver, Charles
Hanover, NH
Psychiatry

Currie, Patrick
Winston-Salem, NC

Davis, Walter E.
Durham, NC
Hem.-Onc.

Dick, W. Barton
Lexington, KY

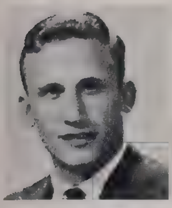
Dillingham, Wm.
Burlington, NC



Duke, W.H.

Ferris, Barry
Rosh Pinna
Pediatrics

Fisher, Robert B.
Bainbr'dg. Is., WA
Psychiatry



Ford, Raymond F.
Charlot'vle, VA

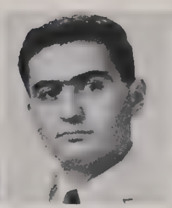
Fox, William W.
Gladwyne, PA

Graham, Doyle G.
Durham, NC
Neuropathology

Grant, J. Andrew
Lutherville, MD

Greene, John E.
Grand Rapids, MI
Urology

Grehl, Todd M.
Palo Alto, CA



Halikas, James A.
Mequon, WI
Psych. & Med. Ed.

Hammett, Elliot
Chapel Hill, NC

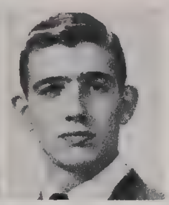
Hayter, George M.
Anaheim, CA

Herron, Charles
Jackson, TN
Dermatology

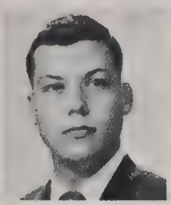
Hitch, David C.
Ok. City, OK
Pediatric Surg.

Hopkins, Christie
Columbia, SC
Cardiology

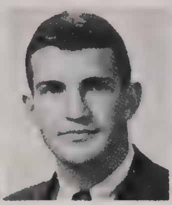
Hudson, Terry M.
Gainesville, FL
Diagnostic Rad.



Johnson, James R.
Sacramento, CA



Kline, George L.
Pawnee, OK



Kohler, Stewart
Fredericksb'g, VA
Rheumatology

Lewis, Alvin M.
Rosenberg, TX
Peds. & Adol. Med.

Lohrbauer, Leif
Jacksonville, FL
Cardiology

Martin, Mitz M.
Easley, SC
Radiation Onc.

McCully, James G.
St. Sim. Isl, GA
Diagnostic Rad

McGregor, Douglas
Overland Pk., KS
Pathology

Smith, Roberta M.
Savannah, GA
Neonatology

Mignone, Robert
Swampscott, MA
Pshyciatry

Morriss, Frank H.
Houston, TX
Neo. & Peri. Med.

Nash, James L.
Chapel Hill, NC
Psychiatry

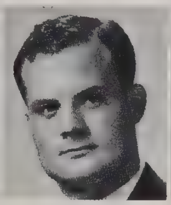
Niemeyer, Charles
Gastonia, NC
Orthopaedic Surg.

Norton, Charles
Sewickley, PA

Nucifora, T.L.

Obenour, Wm. H.
Houston, TX
Internal Medicine

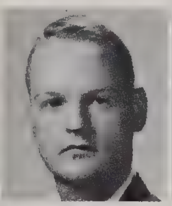
Osteen, Robert T.
Chestnut Hill, MA



Painter, S., Jr.

Palmer, Earl A.
Lake Oswego, OR
Ped. Ophth.

Perriello, V.A.
Ivy, VA
Pediatrics



Pierson, Willard
Raleigh, NC
Int. Med.-GE

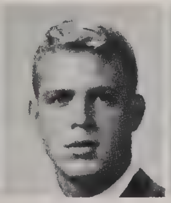
Price, William D.
Summerville, SC
Ophthalmology

Redding, Marshall
E'beth City, NC
Ophthalmology

Reilly, M.D.

Rich, John M.
Kettering, OH
Cardiology

Robertson, James
Pac. Palis., CA



Rozear, Marvin
Pensacola, FL

Saltz, James E.
Tucumcari, NM
Pediatrics

Scarborough, W. Jr.

Shock, John P.
Little Rock, AR
Ophthalmology

Smith, Craig T.
San Francisco, CA

Smith, David L.
Edmond, OK
Inf. Dis. & Epid.

Snead, Joseph A.
Americus, GA

Geade, Jane T.
Hillsborough, NC
Pathology

Threlkel, Robert
Jacksonville, FL
Pediatrics

Wasserman, Louis
Va. Beach, VA

Weber, Jaroy, Jr.
Woodside, CA
Plastic Surgery

Alexander, Ann W.
Gainesville, FL

Wilson, R.A., Jr.

Witherspoon, John
Richmond, VA
Assoc. Prof. Med

Zirkle, Lewis G.
Richland, WA
Orthopaedic Surg

ALSO GRADUATING
WITH THIS CLASS

Katz, Sheila M.
Gladwyne, PA
Pathology

Newmark, Emanuel
Lake Worth, FL
Ophthalmology

ALSO GRADUATING
WITH THIS CLASS

Ray, Karl A.
Lansdale, PA
Psychiatry

Scott, G. Stuart
Washington, DC
Med. & Pulm. Dis.

Obenour, Linda
Houston, TX
Ophthalmology

ALSO GRADUATING
WITH THIS CLASS

Smith, David H.
Savannah, GA
Plastic Surgery

Stewart, John J.
Staten Isl., NY

Valicenti, James
Providence, RI

ENTERING CLASS
OF 1963

Aaron, P.

Allen, David G.
Carthage, NC
Medical Oncology

Auburn, Robert M.
Ventura, CA
Ob-Gyn-Infert.

Austin, Henry V.
South'n Pines, NC

Bath, Nicholas M.
Stone Mtn., GA
Urology

Beshear, Robert
Montgomery, AL
Pediatrics

Blackburn, Wm. W.
Atlanta, GA
Plastic Surgery

Boggess, Howard
Durham, NC

Broadbent, David
Rochester, NY
Pediatrics

Brown, Gerald L.
McLean, VA
Psy & Psychoanal

Brown, Walter A.
Providence, RI
Psychiatry

Buehler, John M.
Evanston, IL
Int. Med.-Pulm.

Bunin, John T.
Martinsville, VA

Burwell, W.

Butler, Stephen
Orlando, FL
Urology

Campbell, Barry
Carlsbad, CA
Radiology

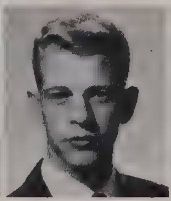
Chervin, Paul N.
Lexington, MA
Neurology

Clark, J.

Crawford, Fred
Mt. Pleasant, SC
Thor. & CV Surg.

Danford, Jerry L.
Durham, NC

Dean, Arther J.
Columbia, SC
Dermatology


Dehart, H. Sykes
Greenville, SC
Urology

Delse, Frederick
Los Altos Hls, CA
Psychiatry

Dodson, W. Edwin
St. Louis, MO

Farber, Mark B.
Indianapolis, IN
Pulmonary Dis.

Flaherty, John T.
Baltimore, MD
Int. Med.-Card.

Futrell, William
Pittsburgh, PA
Plastic Surgery

Gaines, Robert W.
Columbia, MD
Orthopedic Surg.

Gallis, Harry A.
Chapel Hill, NC
Int. Med.-Inf. Dz.

Gallotto, J.

Gianaras, George

Giordano, Vincent
Endicott, NY

Grode, David L.
Martinsburg, WV
Radiology

Harper, Eugene J.
Harrisonburg, VA
General Surgery

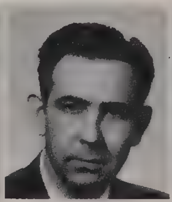
Sugioka, Mary H.
Chapel Hill, NC
Pediatrics

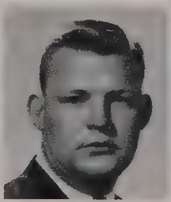
Hollister, David
Olivette, MD.

Huddleston, John
Birmingham, AL
Mat. & Fetal Med.

Jones, D.

Johnston, Janice
Simsbury, CT
Pediatrics


Jurgelsky, Wm.
Durham, NC
Cancer Research

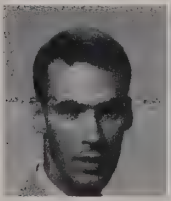

Kendall, Eugene
Leawood, KS
Cardiology

Kesler, Richard
Charlot'vle, VA
Pediatrics

Klein, G.

Kurtz, Robert M.

Levine, Michael
Shorewood, WI
Ped-Handic Child.


Lynch, Charles T.
Hampdn H'land, ME
Radiology

Maniscalco, B.S.
Tampa, FL
Cardiovasc. Dis.

Marcus, D.

Marshall, Robert
Houston, TX
Pediatric Endo

Matthews, Minor
Medford, OR
Cardiology

McLees, Byron D.
Bethesda, MD

McMillan, Michael
Conway, SC
Orthopedic Surg.

Meriwether, Del.
Washington, DC
Hematology

Miller, Robert F.
Salt Lake C'y, UT

Otchin, Neil S.
Bethesda, MD
Int. Med.-Admin.

Parker, H.

Peery, Charles V.
Charleston, SC
Ob.-Gyn.

Raynor, A. Clark
Stuart, FL
Plastic Surgery

Riddick, Daniel
Torrington, CT
Ob.-Gyn.

Robinson, Stephen
Greensboro, NC
Neurosurgery

Rogol, Alan D.
Charlot'vle, VA
Pediatrics-Endo.

Rosati, Robert A.
Durham, NC
Cardiology

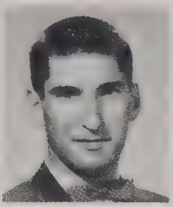
Samuels, Jesse
Carrboro, NC
Fam. & Emerg. Med

Saunders, Wade H.
Asheville, NC
Cardiology

Scarborough, W.
Raleigh, NC
Psychiatry

Scherer, James
Winston-Salem, NC

Schneider, Henry
Huntingdon V., PA
Urology



Segal, Herbert E.
Silver Spring, MD

Speropoulos, A.

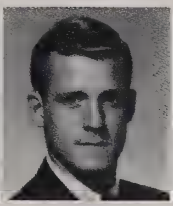
Stowell, Jeremy
Fairfax St'n, VA
Psychiatry

Stubbs, Allston
Winston-Salem, NC
Uro. & Uro. Surg.

Thrash, Melvin L.
New York, NY
Psychiatry

Trout, Hugh H.
Washington, DC
Vascular Surgery

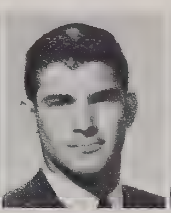
Twele, Thomas W.
El Paso, TX
Int. Med.-Hem. Onc.



Underwood, Lee C.
Kalamazoo, MI
Urology

Vollmer, Robin T.
Durham, NC
Surgicial Path.

Wetterau, Norman
Dansville, NY
Family Medicine



Wilfong, Robert
New Bern, NC
Neurosurgery

Williams, Donald
San Diego, CA
Psychiatry

Willson, Leroy M.
Macon, GA
Cardiology

Willwerth, Ben M.
Elmira, NY
Gen. & Vas. Sur

ALSO GRADUATING
WITH THIS CLASS

Ayers, Leona W.
Columbus, OH
Clin Path & Micro

Beck, Robert L.
San Antonio, TX

Clausen, Jack L.
La Jolla, CA
Pulmonary Med.

Gerber, Carl J.
Tacoma, WA
Psych. & Neuro.

Woodard, Thomas
Lakeland, FL
Urology

ALSO GRADUATING
WITH THIS CLASS

Head, Rufus W.
Grants Pass, OR
Radiology

Modir, Jamal
San Jose, CA
General Surgery

Smith, Sandra M.
Tucson, AZ
Pediatrics

I write as a member of the graduating Class of 1967. This class represented a group of students selected on an individual basis without a computer and under the weight of far fewer guidelines than are currently directed at admissions committees. This class enjoyed the benefit of being selected by Drs. Markee, Fetter, Hendrix, Howell, Hull, Peele, and Rhodes.

Students were very much aware of the fact that they were individuals selected from a variety of backgrounds, geographical areas, and previous academic exposure.

From the first days of the first year, it was clear that the Class of 1967 would learn anatomy in dark, poorly ventilated, and highly malodorous rooms, and that we would share the Anatomy faculty with movie making, TV experimentation, autopsies, clinical teaching, publishing, and admissions duties. No department was to take the interest in and the time with this class as did the Anatomy Department, under the direction of such people as Drs. Markee, Peele, Duke, Everett, and Hetherington, and ably assisted by the likes of Alice Wheeler, May King, and Sam Agnello.

Our class enjoyed a great number of the early faculty who, under the guidance of Dean Davison, had been very influential in developing Duke into the place of prominence it enjoyed in the 1950's and 1960's. Students were frequently reminded of the impact that Johns Hopkins, the University of Chicago, Emory, Stanford and Harvard had had on Duke's early development, and were equally aware of Duke's contributions to the Universities of Florida, Pittsburgh, Ohio and Indiana.

This class was one of the last under the original curriculum of two years of basic science followed by a series of rotations through clinical specialties the last two years. Early on, there were the Animal Tower, the old anatomy and pathology labs accompanied by poorly lit classrooms, and the famous, but cold and uncomfortable, amphitheater. One of the hardest lessons to learn was how to operate the elevator between the Dope Shop and the third and fourth floors without ending up in the Animal Tower.

By the end of the second year, everyone felt that they had arrived. We had enjoyed the likes of Dr. Markee, Dr. D.T. Smith from Microbiology, and Drs. Forbus and Kinney from Pathology. Everyone had had their Mumps testings and BCG, and we were convinced by Dr. Chuck Mengel that no one but medical students could do CBC's, U/A's, LE Preps, and Stool Guaiacs. Black Jack Flanagan, M.D., had done a good job of showing us that all of physical diagnosis was based on what you could hear, see, feel, and gain from proper questioning. We were aware that Dr. George Baylin felt all of medicine was in terms of black and white and found on a viewbox.

Finances were improving during the years this class was at Duke. The stories were still there of interns working for Dr. Stead on a schedule of 13 days on, 1 day off, in exchange for room and board and $25 per month (that meant 312 hours on and 24 hours off with a bed in the old Baker House and food when you could get through the cafeteria line). However, the class was assured that the house staff would be paid better in the future and quick money could always be raised by selling a unit of blood; selling out for experimental testing in Radiation Medicine or for experimental cathetherization; and if the men happened to have the proper blood type, Dr. Christakos would sometimes need sperm for his matched artifical insemination program.

Socially, thanks to Duke's geographic location and its administration, we learned the proper way to segregate the large public wards was by color, not by sex. Therefore, you decided whether your patient was on Long or Osler Ward after you found out whether he or she was black or white.

CPC's were fun and the highlight of the week. Med students were ideal EKG technicians. Dr. Stead and the Department of Medicine were "king". There was little interest in training the GP or Family Physician, and we were all convinced by Dr. Parker and the Ob-Gyn Department that no one with less training than a third-year resident could do a D&C or deliver a baby. C-sections were a no-no. Dr. Sabiston was establishing his pecking order, and had pushed the "old-timers" to the back, fired the anesthesia group, and made it clear that he was interested only in training future educators. Dr. Lowenbach and the Department of Psychiatry did their best to convince us that all of medicine was psychiatry, while the likes of Drs. DeMaria, Spach and Spock did their best to convince us that pediatrics was really more than practicing big people medicine on little people.

This was a class which was fairly close and probably the first of the transitional classes in Duke's move toward a new curriculum. The days were very busy and much fun, and were probably best portrayed through the efforts and good work of the likes of Drs. Mike Levine and Jesse Samuels in their class play production entitled "Cram-a-lot".

Jim Saltz, M.D. '67

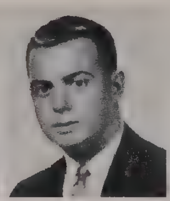
ENTERING CLASS OF 1964

Abbey, W.D.

Arons, Michael J.
Reston, VA
Psychiatry

Atkinson, John
Macon, GA
Internal Medicine

Baylin, Stephen
Baltimore, MD


Bickers, Peter
Omaha, NE

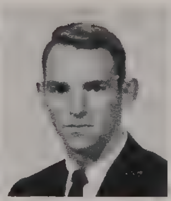
Block, Michael A.
San Francisco, CA

Brickman, Martin
Santa Monica, CA

Carlton, Bruce
Rodeo, CA
Dermatology

Cheek, Allan
Evansville, IN

Chotiner, Gerald
Marietta, GA
Dermatology


Cook, Joseh W.
Charlotte, NC
Cardovasc. Surg.

Crosson, Ann W.
Brookline, MA
Anatomic Path.

Damiano, Richard
Englewood, CO
Corneal Surgery

Duttera, Julian
La Grange, CA
Medical Oncology

Edwards, Sam B.
Morgantown, WV
Pediatric Card.

Eisenberg, Carl
Mequon, WI
Pediatrics

Ellwanger, Fred.
Chesapeake, VA

Elmore, Wm. G.
Roanoke Rpds, NC
Radiology

Elsas, Frederick
Birmingham, AL
Ophthalmology

Emslie, Robert J.
Oregon, WI
Int. Med.-G.E.

Entman, Stephen
Columbia, SC
Ob.-Gyn.

Fahy, Hugh T.
Albuquerque, NM

Fee, William H.
Franklin, PA
Int. Med.-Pulm.

Flaherty, Lois
Baltimore, MD
Child Psychiatry

Foscue, Henry A.
Tallahassee, FL
Pulmonary Med.

Freeman, Douglas
Raleigh, NC
Rheum.-All. & Imm.

Freeman, Elise
Newton, MA

Freeman, Jonathan
Newton, MA

Goldenberg, Robt.
Leeds, AL

Goodner, David M.
Philadelphia, PA
Ob.-Gyn.

Green, Richard
Pittsburgh, PA
Int. Med.-Allergy

Haberkern, Robert
Washington, DC

Hall, James H.
Eastville, VA

Harrison, Frank
Ona, WV

Hart, John M.H.
Galax, VA
Urology

Henley, Thomas F.
Greensboro, NC
Ob.-Gyn.

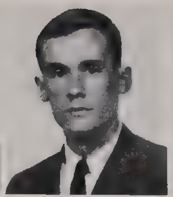
Henry, David P.
Chicago, IL

Hoffman, Phillip
San Francisco, CA
Ob-Gyn & Endo

Bickers, Gayle H.
Omaha, NE

Hopkins, Jay E.
Lynchberg, VA
Orthopaedics

Hutchinson, F.
Greenville, SC


Hyers, Thomas M.
Aurora, CO
Int. Med.-Pulm.

Lampertz, Gitta
Berlin, Germany

Johnson, Laurance
San Rafael, CA
Child & Adult Psy

Jones, Darnell
Greenville, NC
Ob.-Gyn

Jones, Howard W.
Larkspur, CA
Ob.-Gyn.

Kern, Frank
Philadelphia, PA
Dermatology

Klein, G.B.

Kunstling, Ted R.
Raleigh, NC
Pulmonary Disease

Kwart, Arnold M.
Washington, DC
Urol & Urol Surg

Lebbin, Dennis R.
Clarendon, H. IL
Int. Med.-Endo.

Logan, W.S.
Charlotte, NC
Dermatology

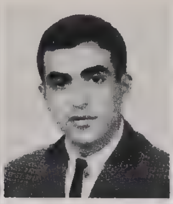
Mandetta, Donald
Boalsburg, PA
Int. Med.-G.E

Marcus, D.L.

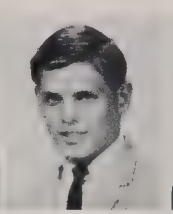
Miller, R.D.

Miller, Richard
Setauket, NY
Dermatology

Moore, Terence N.
Charleston, SC
Radiology

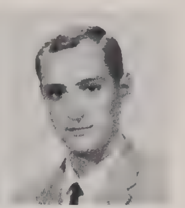

Morton, Robert
Potomac, MD
Gastroenterology

Older, Robert A.
Hillsborough, NC
Radiology


Park, William T.
Mobile, AL
Orthopaedics

Parker, Michael
Winston-Salem, NC
Radiology

Plonk, James W.
Charlotte, NC
Int. Med.-Endo.


Porter, Roger J.
Rockville, MD
Neurology

Reisman, Terence
Tallahassee, FL
Gastroenterology

Sarver, Edward J.
Ogden, UT
Diagnostic Rad.

Seligson, David
Roxbury, MA

Seningen, Ronald
Virginia, MN
Radiology

Sherwood, Geoff.
Waban, MA
Blood Banking

Silvers, David
New York, NY
Path. & Derm.

Simpson, Joe L.
Chicago, IL
Ob.-Gyn.-Genetics

Snider, Joel J.
Campbridge, MA
Internal Medicine

Sollek, Mark G.
Seattle, WA
Int. Med.-Neph

Stucky, R. Chris
N. Brunswick, NJ
Child & Adult Psy

Taft, Charles V.
Winston-Salem, NC
Orthopaedics

Taylor, Andrew T.
La Jolla, CA
Nuclear Medicine

Thurston, Thomas
Salisbury, NC
Ob.-Gyn.

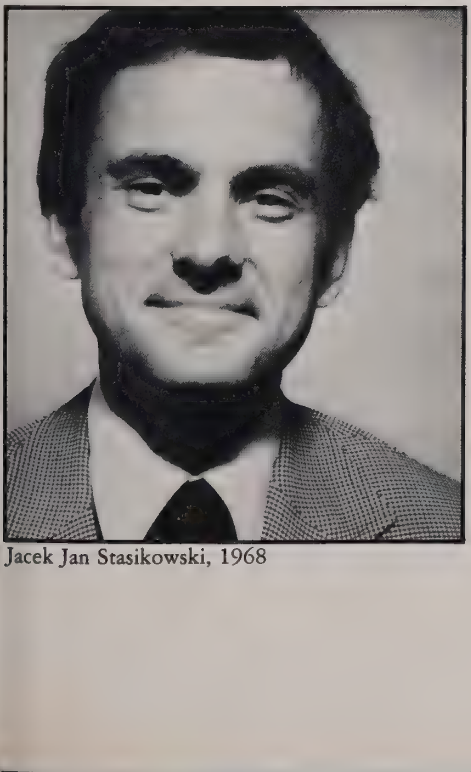
Kirkland, Rebecca
Cherry Hill, NJ

Wald, Harlan
Hollywood, FL
Plas & Recon Surg.

Wexler, John P.
New Rochelle, NY
Rad.-Nuclcer Med.

Wheeler, Wm. F.
Gainesville, FL

Wohlgemuth, S.A.
Atlanta, GA
Internal Medicine


Jacek Jan Stasikowski, 1968

ALSO GRADUATING WITH THIS CLASS

Katz, David H.
La Jolla, CA
Immunology

Levy, Bertram J.
Port Townsend, WA
Urology

Stasikowski, J.
Fort Worth, TX
Ortho & Hand Surg

Utley, John D.
Chicago, IL

Wilson, James W.
Tulsa, OK

Wynne, Marigail
Richmond, VA

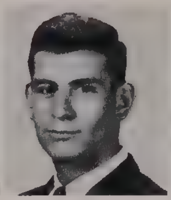
Unidentified, Eugene Stead, Bill Ward, Skip Burton, Harry Gallis, unidentified, Esther Costel, Chris Stahl (sitting)

ENTERING CLASS OF 1965

Ayer, Frederick
Baltimore, MD

Bierfeld, James
Miami, FL

Boylston, James
Charlotte, NC
Pathology


Budd, Daniel C.
Montville, NJ
General Surgery

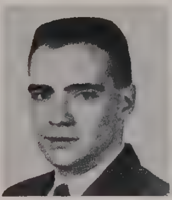
Carmalt, Duane
Los Angeles, CA

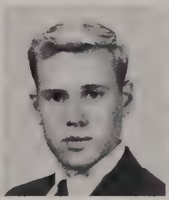
Chang, Jack H.T.
Englewood, CO
Pediatric Surgery

Cohen, Harvey J.
Concord, MA
Peds-Hem. Onc.

Cook, Jay David
Dallas, TX
Child Neurology

Crowe, John K.
Phoenix, AZ
Diagnostic Rad.


Cruikshank, D.P.
Bethesda, MD


Davis, Arthur B.
Long Beach, CA
Ent & Plastics

Devito, Peter C.
Sullivan Is., SC
Plastic Surgery

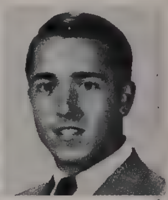
Dixon, Richard H.
State College, PA

Dunn, Neil M.
San Antonio, TX
Pathology

Elson, Melvin L.
Nashville, TN
Dermatology

English, Thomas
Arden, NC
General Surgery

Entmacher, Mich.
Paxton, MA
Hem.-Onc.

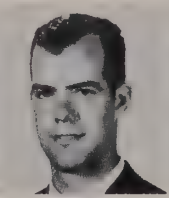

Fauntleroy, Thom.
Easton, MD
Cardiology

Foster, Stephen
Newton, MA
Ophthalmology

Fox, James W.
Rochester, NY
Ophthalmology

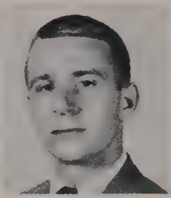
Geller, Richard
Topeka, KS
Psychiatry

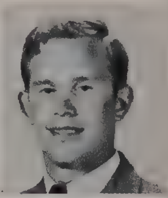
Gentzler, Richard
Lancaster, PA
Cardiology

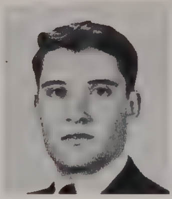

Gerde, L.S.

Gervin, Alfred S.
Nashville, TN

Giles, Harlan R.
Lubbock, TX
Matern.-Fetal Med


Goldberg, Bertram
Aurora, CO
Orthopedic Surg.


Grimson, Baird
Chapel Hill, NC
Neuro-Ophthalmol.

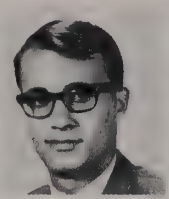

Gruenwald, Chas.
Baton Rouge, LA

Haberkern, Roy C.
Elizabeth C'y, NC
Pediatrics

Morriss, Mary J.
Houston, TX
Pediatric Card.

Hardman, S., Jr.

Henderson, Rich.
Fair Oaks, CA


Hill, David P.
Wheeling, WV
Psychiatry

Hoover, Eddie L.
New York, NY
Cardiothoracic S.

Horten, Bruce C.
Stanford, CA

Holmes, E.J.

Jackson, Don J.
Clarksville, TN
Ophthalmology

Jenkins, James H.
La Jolla, CA
Pediatrics

Johnson, Fred.
Houston, TX

Karsh, Richard B.
San Francisco, CA
Radiology

Kernodle, Harold
Burlington, NC
Orthopedic Surg.

Kidd, J.G., Jr.

Kirkpatrick, D.
Mapelton, UT

Koff, Stephen A.
Ann Arbor, MI
Ped. Urology

Lawrence, Dale N.
Avondale Est., GA
Int. Med.-Inf. Dz

Levie, Benton B.
Decatur, AL
Pediatrics

Levy, Steven T.
Atlanta, GA

Lonon, Robert W.
Scott AFB, IL

Malone, C. Bruce
Austin, TX
Orthopedic Surg.

Marafioti, Rich.
Los Angeles, CA
Orthopedic Surg.

Marger, Donald
Dayton, OH
Therapeutic Rad.

Masters, Stuart
Pittsfield, MA
Diagnostic Rad.

McNeeley, R.H.

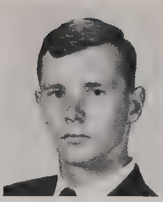
Meyer, Alan H.
Sacramento, CA
Internal Medicine

Moore, Dan C.
Geneva 1209
Pediatric Endo.

Moorefield, Wm.
Charlotte, NC
Orthopaedics

Morawetz, Richard
Birmingham, AL
Neurosurgery

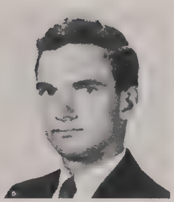
Newman, Larry B.
Memphis, TN
Urology


Palko, D.B.

Van Bruggen, Jane
Durham, NC

Ramsey, Maynard
Tampa, FL

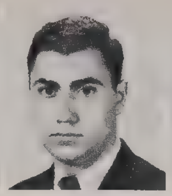
Remigailo, Rich.
Stone Mtn., GA


Rienstra, J.D.

Edwards, Diane R.
Durham, NC
Pediatrics

Rosenbaum, D.H.

Rowe, Vernon D.
Charleston, MA

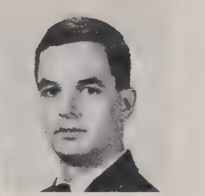

Rummo, Nicholas
Katonah, NY

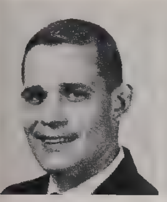
Rundles, C.

Sander, C.M.

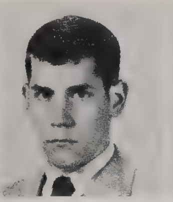
Smith, Charles D.
Charleston, SC
Pediatric Surg

Smoak, D.L.


Tobe, R.H.


Tremaine, Myron
Rockville, MD

Valiant, Martha
Clewiston, FL
Pediatrics


Valle, David L.
Baltimore, MD

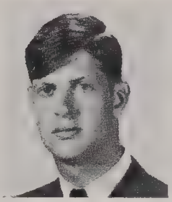
Vinten-Johansen, P.

ALSO
GRADUATING
WITH THIS
CLASS

Alexander, Wayne
Wellesley Hls, MA
Cardiology

Cato, Allen E.
Hillsborough, NC
Pediatrics

Gagliano, Angelo
Altoona, PA
Anesthesiology


Volberg, Frank H.
Chapel Hill, NC

Williams, Randal
Hickory, NC
Ophthalmology

Wise, Thomas N.
McLean, VA
Psychiatry

Zavelson, Thomas
Gainesville, FL
Pediatrics

ALSO GRADUATING
WITH THIS CLASS

Keats, Philip K.
Morristown, NJ
Orthopedic Surg.

Megna, Daniel
Staten Isl., NY

Utley, Henry G.
Athens, GA
Ophthalmology

Waggoner, David
Solon, OH
Internal Medicine

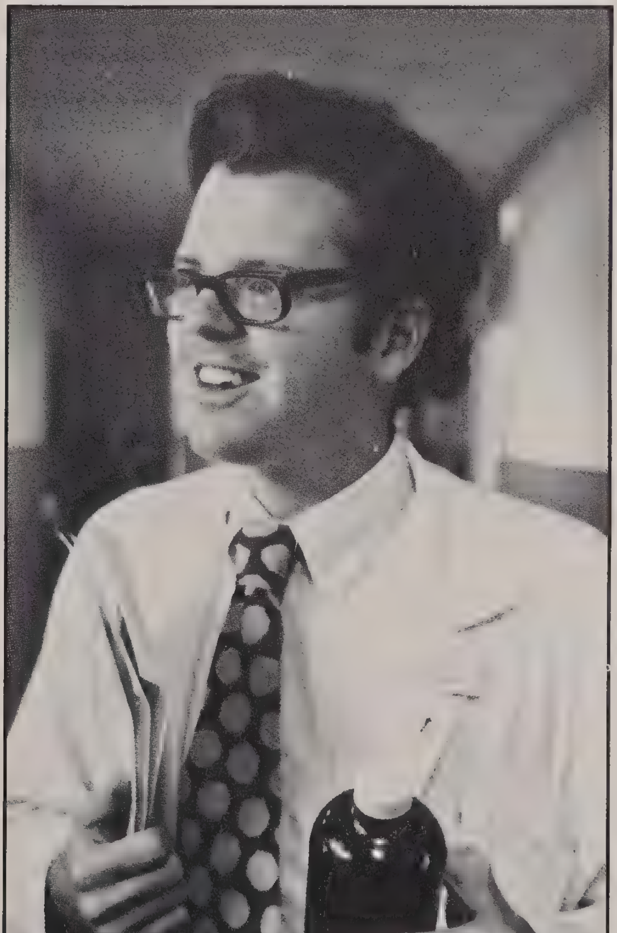
Whitfield, Rich.
Bakersfield, CA

HELP TO GROW GROW TO HELP
be a hospital helper when you grow up

Ed Cox and Friend, 1971

Mike McLeod, about 1971

George Leight, 1972


Peter English, 1973

ENTERING CLASS
OF 1966

Aksel, Sezer
Durham, NC

Alpert, Eric D.
Sun City, AZ
Radiology

Angelillo, John
Durham, NC
Oral & Max. Surg.

Austin, Thomas E.
Taos, NM
Radiology

Ayars, Paul K.
Corpus Chris., TX
Ophtalmology

Baggs, Wm. J.
Carlsbad, NM

Ball, John R.
Bethesda, MD
Health Policy

Ballenger, James
Charlot'vle, VA
Psychiatry

Black, Edward B.
Charlotte, NC

Boaz, David E.
San Francisco, CA

Bost, Ronald E.
Baltimore, MD
Dermatology

Busby, M. Rudy
Salisbury, NC
General Surgery

Campbell, Clinton
New York, NY

Cato, A.E., Jr.

Caughey, Dale W.
Wilmington, NC
Family Practice

Clark, Arthur W.
Albany, NY

Coleman, Michael
Ft. Smith, AR

Comiter, Henry
Fern Park, FL
Neurology

Conetta, Donald
Orange Park, FL
Cardiology

Corless, Joseph
Durham, NC
Vis & Biomed Res.

Everhart, Richard
Seattle, WA

Forth, Paul T.
Houston, TX
Internal Medicine

Ghanem, Elias F.
Las Vegas, NV

Gill, Lowell H.
Charlotte, NC
Orthopaedic Surg.

Gold, Philip W.
Washington, DC
Psychiatry

Gordon, Robert
Miami, FL
Radiology

Goscin, Stephen
Hollywood, FL
Pathology

Green, Linda D.
Mt. Ranier, MD
Medical Oncology

Gwynne, John T.
Chapel Hill, NC
Endocrinology

Harrison, Thomas
Baker, OR
Internal Medicine

Hawkins, Hal K.
Tucker, GA
Pathology

Head, H. David
Washington, DC
Cardiovasc. Surg.

Horton, John A.
Washington, DC

Hybarger, Charles
Pensacola, FL

Jeffords, Dexter
St. Louis Pk, MN
Urologic Surgery

Jenkins, Edwin B.
Decatur, AL

Jones, E.L., III

Karlin, Jan V.
San Francisco, CA

Kelly, Gregory A.
Phippsburg, ME
General Surgery

Kelly, James R.
Durham, NC
Internal Medicine

Kinney, Thomas
Durham, NC
Ped. Hem.-Onc.

Kizer, John S.
Chapel Hill, NC
Neuroendocrin.

Krackow, Kenneth
Baltimore, MD
Orthopaedic Surg.

Kutner, Wm. A.
Dunkirk, NY

Labance, Michael
Pinellas Park, FL

Lord, Patricia L.
San Francisco, CA

Lewis, Barnett
Lexington, KY
Pediatrics

Marchand, Anthony
Livingston, NJ
Pathology

Marotta, Charles
Cambridge, MA
Neuropsych. Res.

Marusov, Paul N.
San Diego, CA
Pediatrics

Mason, Janet
Southbury, CT

Maw, Gilbert M.
Honolulu, HI
Pathology

McGuffin, Wm. L.
Houston, TX
Neph.-Hypertens.

Miller, James A.
San Francisco, CA

Miller, Joseph
San Antonio, TX
Radiology

Miller, Walter L.
San Francisco, CA

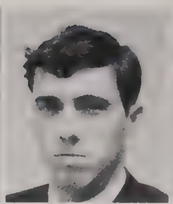
Mohl, Paul C.
San Antonio, TX
Psychology

Needel, Norman H.
San Diego, CA

New, William
Woodside, CA
Anesthesiology

O'Neill, Wm., Jr.
Salt Lake Cty, UT

Palko, Daniel B.
Feeding Hills, MA



Pease, Howard F.
El Paso, TX
Adult Cardiology

Pizzo, Salvatore
Durham, NC
Pathology

Reiley, Thomas T.
Salt Lake Cty, UT

Reynolds, Philip
San Diego, CA

Scales, Susan M.
W.P.A.F.B., OH
Pediatrics

Schmits, Richard
Binghamton, NY
Family Practice

Schostal, Cliff.
North Bend, OR
Neurology

Shelburne, John
Durham, NC
Pathology

Silver, Carol D.
New York, NY

Smith, Forrest O.
Berkeley, CA

Smith, Harold A.
Lancaster, PA
Emergency Med

Smith, Wm. T.
Wooster, OH
Family Practice

Sohn, Stephen A.
Newton, MA

Somers, Wm. R.
Williamsport, PA
Gastroenterology

Stead, Nancy W.
Durham, NC
Hem.-Onc.

Tucker, Wm. K.
Gainesville, FL
Anesthesiology

Waite, Robert S.
Durham, NC

Walker, Margaret
San Leandro, CA
Neonatology

Waterbor, Robert
Palm Springs, CA
Internal Medicine

Weintraub, R.B.

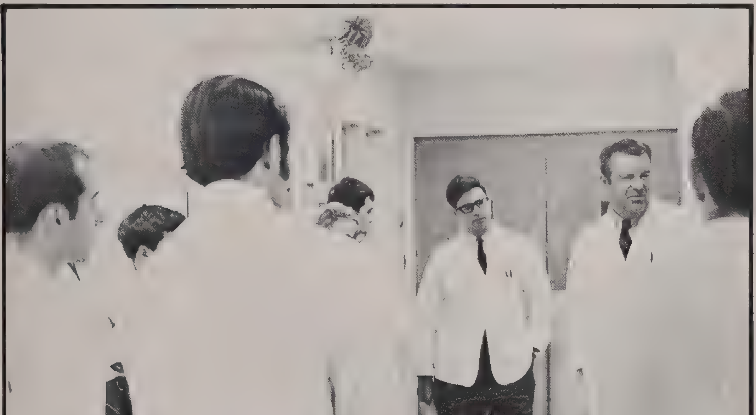
ALSO GRADUATING WITH THIS CLASS

Engel, Peter A.
Cambridge, MA

Lord, Guy R.
San Francisco, CA

Silberberg, Wm.
Woodbridge, CT
Pediatrics

Sommers, Wm. A.
Yuma, AZ



Dr. Parker's rounds, ca. 1970

On call, about 1970

When I became a student at Duke Medical School, the Gothic architecture and enormous shade trees were familiar sights. I had been raised on after-dinner walks, the highlight of which was a ride on the green elevator in the Davison Building. From observing my father, I knew doctors kept demanding schedules. But none of us really knew what medical school would be like in September, 1966.

My class was the first to travel through this institution via the modified road which is known as "the new curriculum". During the first year, the faculties of Anatomy, Biochemistry, Physiology, Pathology, Microbiology, and others presented basic biological and pathological concepts in great number and with great speed. Any student who was able to apply the relevant bits of data to living patients could have hung up his shingle in 1967, skipping over the remaining years of medical school and house staff training. I remember well "studying" for exams in June of 1967 by looking at the 18-inch pile of handouts en masse; time precluded individual review. It really seems to me that the most important lesson in those nine months was how to read the books so that I could peruse them when their various bits of data became relevant to a particular sick person. The vascular supply of the lower extremities was never identified on our cadaver, because in view of the time constraints of the new curriculum, our cadavers were fetuses. Even Mrs. Rundles' repeated demonstrations on the adult cadaver didn't stick in my memory very well until they were reinforced by symptomatic patients.

People do not come in carbon copies and their illnesses don't either. Moreover, modern technology keeps changing the science of medicine. A doctor's education is never complete. He teaches himself a great deal, and the remaining years of medical school that were spent on the wards or under the preceptorship of one member of the faculty were merely the beginning of this process. Several vignettes will give the flavor.

When the facts don't fit together, go talk some more to the patient. I was a second-year student on Pediatrics when a four year-old boy was brought to the emergency room very late on Saturday night or early Sunday morning. His tongue had been oozing blood for a week. He didn't appear too sick, and before going to sleep, the intern told me to treat his anemia with iron. My memory told me that I shouldn't treat anemia without counting reticulocytes. The result of 25% (certainly not very accurate, but just as certainly elevated) sent me back to ask the child's mother again why she'd brought her son to the emergency room. After a while, in reply to my question about other members of the family bleeding like this, she said, "His uncle and brother are both hemophiliacs." When the whole blood clotting time was prolonged one minute, I woke the intern to tell him I thought this little boy had hemophilia, not iron deficiency.

There's a time to put all the patient's marbles in one basket, but there's a time when it doesn't matter. I remember well a middle-aged man who had an anterior myocardial infarction complicated by the development of a ventricular septal defect. After six weeks of hemoptysis and sloshing blood into his left ventricle during diastole and into his right ventricle during systole, he went to surgery. The risks of dying on the operating room table were high but less than the 100% risk of dying without an operation. I had never bet in this league before. In contrast, I saw a woman with end-stage Hodgkin's disease who came to the emergency room comatose and hypotensive, either from taking too much of the methadone she'd been given for pain or from gram-negative sepsis. I reasoned, and my mentor Hal Silberman agreed, that the sepsis issue was unimportant, because if she had it and she survived it, she would still be afflicted with refractory Hodgkin's disease that would kill her in a week or two.

These paragraphs could go on and on, because they recount the small, real-life situations which flesh out the grand scheme of pathophysiology I heard about in those first nine months of school.

Nancy Stead, M.D. '67

Student Faculty show, ca. 1970

Student Faculty Show, ca. 1970

Student Faculty Show, ca. 1970

ENTERING CLASS OF 1967

Abraham, Gerald
New York, NY

Ahmann, Gerald B.
Bethesda, MD
Oncology

Barnes, Robert P.
San Antonio, TX

Baten, Michael
Charlot'vle, VA

Beach, Roberta K.
Boulder, CO
Pediatrics

Behringer, Fred.
Novato, CA
Dermatology

Belmaker, Elaine
St. Louis, MO

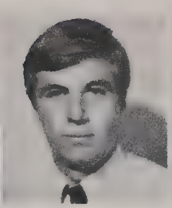
Belmaker, Robert
Jerusalem

Beuttel, Stephen
Chesapeake, VA
Endo -Metabolism

Boehm, Timothy M.
Silver Spring, MD

Caldwell, Patric.
Columbus, OH
Cardiology

Bradford, M.M.


Brater, Donald
San Francisco, CA

Buckley, David K.
Ft. L'dale, FL

Buffington, Jos.
Olney, MD
Ob.-Gyn.

Cies, W. Andrew
Cor. Del Mar, CA
Ophthalmology

Cobbs, Walter H.
Narbeth, PA
Neurology

Colpitts, Michael
Seattle, WA

Cox, Edwin B.
Durham, NC
Hem.-Onc.

Croker, Byron P.
Durham, NC
Pathology

Curry, Robert W.
Gainesville, FL
Int. Med.-F. Prac.

Davis, Holly W.
Pittsburgh, PA
Pediatrics

Norton, Linda E.
Dallas, TX
Forensic Path.

Ehrm. M.L.

Ell, M.A.

Smith, Fredrica
Los Alamos, NM
Rheumatology

Felsenfeld, A.J.
Chapel Hill, NC

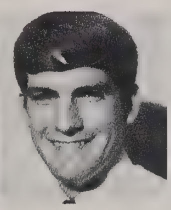
Fichtelman, Jon
Miami, FL

Fischer, Kenneth
Miami, FL
Am. Board Neurol.

Gilmore, Robert
Dallas, TX

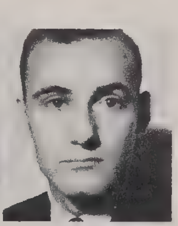
Haliasos, Const.
W. Hempstead, NY
Internal Medicine

Hartley, David
Durham, NC
Child Psychiatry


High, William L.
Houston, TX
Neurology

Horne, McDonald
Richardson, TX

Horowitz, Alan J.
Smithsburg, MD
Child Psychiatry


Hourigan, Philip
Mansfield, MA
Pediatrics

Hoverman, John R.
Albany, OR
Int. Med.-Hem.

Jaffe, Charles
Napa, CA
Clin. Imm.-All.

Johnson, Van W.
New York, NY

Klingensmith, G.
Denver, CO
Pediatric Endo.

Juk, Steven S.
Columbia, SC
Cardiology

Kaufman, Michael
Matthews, NC
Neurology

Rhodes, Marcia K.
Washington, DC

Leonard, Stephen
Mesa, AZ
Gen. & Vas. Sur

Linfors, Eugene
Durham, NC

Liptak, Gregory
Retsof, NY
Pediatrics

Lloyd, Douglas S.
Wethersfield, CT
Prev Med-Pub Hlth

Lynch, Phillip I.
Pendleton, SC
Pathology

Maack, Walter C.
Geyserville, CA
Fam. Pract., ER

Major, Leslie F.
Binghamton, NY
Psychiatry

Margolis, Robert
Rolling Hills, CA
Medical Oncology

Maulitz, Russell
Philadelphia, PA
History of Med.

McConnell, David
Pittsburgh, PA
Pediatrcis

McCormick, Joseph
Decatur, GA

McGuire, John O.
Asheville, NC
Gen. & Vas. Sur.

Miller, Donald
Ann Arbor, MI
Int. Med.-Onc.

Modlin, John R.
Marblehead, MA
Pediatrics

Nash, Michael L.
Savannah, GA
Nephrology

Neskodny, Jeane
Durham, NC

Oates, Theodore
Rochester, NY

O'Brien, T.C.

Perlstein, Robert
Andrews AFB, MD
Endocrinology

Peterson, Eric
Bad Kreuznach, EU

Poindexter, James
Liverpool, NY

Watson, Susan P.
Portola Val., CA
Ped. Anesthesia

Rawl, John C.
Columbia, SC
Urology

Robertson, Lee J.
New York, NY

Ross, Charles W.
Pompton Pl'ns, NJ
Family Practice

Rothstein, Thomas
Cambridge, MA
Hem.-Onc.

Rutherford, Rich.
Lakeland, FL
Pulmonary Med.

Saikley, Garrett
Gilroy, CA
Diagnostic Rad.

Scardino, Peter
Houston, TX
Urologic Surgery

Schwartz, Martin
Portland, OR
Ob.-Gyn.

Slater, Evan D.
Santa Paula, CA
Int. Med.-Onc.

Sontag, Kurt W.
Denver, CO

Stevens, Richard
Tucson, AZ

Thomas, Bernard
Winter Park, FL
Internal Medicine

Timmons, James M.
Kershaw, SC
Family Practice

Victor, Stephen
Livingston, NJ
Neurology

Wagner, William
South Euclid, OH
Allergy

Walker, John A.
Decatur, GA
Internal Medicine

Walker, Leo L.
Columbia, SC
Endo.-Metab.

Ward, Jonathan M.
Denver, CO
Card.-Vasc. Dis.

Waugh, Lyndon D.
Dunwoody, GA
Child Psychiatry

ALSO GRADUATING WITH THIS CLASS

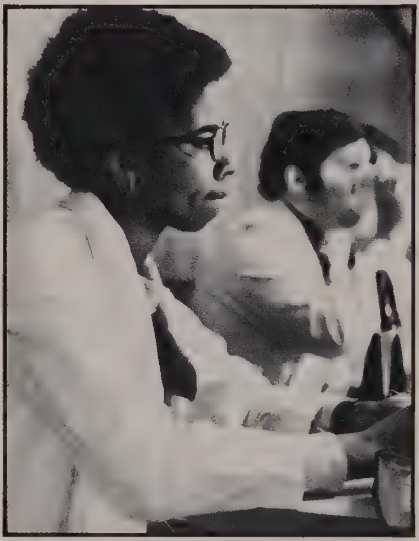
Podgainy, Helen
Sewickley, PA
Pediatrics

Rapchik, Joel
Miami, FL
Internal Medicine

Welch, Wm. R.
Truro, MA
Gyn. Path.

Wilson, James M.
New York, NY

Wood, Eugene W.
Meriden, NH


Joanne A.P. Wilson, 1971

Left to Right: Bill Hugh, Mike Nash, David Wellman at Student-Faculty Show, 1971

ENTERING CLASS OF 1968

Alexander, John
Durham, NC
Gen. & Thor. Sur.

Andersen, Dana
Durham, NC
General Surgery

Andrade, Wm. G.
Baltimore, MD

Andrew, Clifford
Towson, MD
Neuro. & Biochem.

Andrews, Michael
Chapel Hill, NC

Arvan, Glenn D.
Hartsdale, NY

Barco, Daniel H.
Chapel Hill, NC

Bley, Donald E.
Frederickb'g, VA
Family Practice

Bornstein, Neal
Verona, PA

Davis, Pamela
Durham, NC

Butts, John D.
Durham, NC
Forensic Path.

Carnevale, Nich.
Setauket, NY
Neurology

Charney, James
New Haven, CT
Child Psychiatry

Childs, Robert W.
Hazelson, PA
Pediatrics

Cohen, Lawrence
Bethesda, MD

Copeland, Dana D.
Durham, NC
Path. & Neuropath

Dalton, J. David
Summerville, SC
Ortho. Surgery

David Clifford
Pittsboro, NC
Pediatrics

Davis, Glenn C.
Memphis, TN
Psychiatry

Drennan, Dale C.
Washington, DC

Duncan, Charles
Guilford, CT

Eckman, Laurie N.
Lansing, MI

Zarutskie, Susan
Durham, NC
Pediatrics

Ewald, Thomas M.
Ashland, OR
Family Practice

Forth, David S.
Oakland, CA
Pathology

Frey, James L.
Phoenix, AZ
Neurology

Garr, David R.
Tooele, UT
Family Practice

Goodman, Wm.
Pocatello, ID

Gordon, Gene S.
Houston, TX

Grandis, Arnold
Durham, NC
Ob-Gyn.

Gretes, John C.
Charlot'ville, VA

Hankey, Terry L.
Waupaca, WI
Family Practice

Haynes, James H.
Nashville, TN
Pulmonary Med.

Herpel, John K.
Claremont, NH
Ophthalmology

Jarrett, David
Port. Wash., NY
Psychiatry

Kessler, Dale L.
Seattle, WA

Lane, John W.
Durham, NC
Ob-Gyn.

Lawrence, John
San Francisco, CA

Leight, George
Durham, NC
General Surgery

Levitin, David A.
Shrewsbury, MA
Internal Medicine

Levitt, Morton
Bethesda, MD

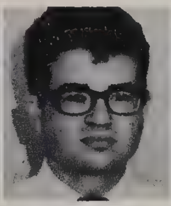
Lewis, Mary K.
Califon, NJ

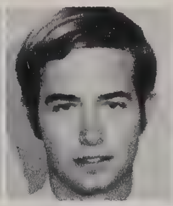
Love, James M.
Durham, NC

Lundy, Edmund G.
Hollywood, FL

Martin, Samuel P.
Philadelphia, PA
Medicine

McCarty, Kenneth
Durham, NC
Pathology


McClure, Charles
Evans, GA
Neurology


McMahon, Edward
Eugene, OR
Pediatrics

McRae, John R.
Ft. Wainwr'ht, AK

Michel, Randall
Lompoc, CA
Otolaryngology

Migliori, John G.
San Diego, CA
Anesthesiology

Miller, Clinton
Shaker H'ghts, OH

Mittler, Brant S.
San Antonio, TX
Internal Medicine

Morrow, J.F.

Oakes, W. Jerry
Don Mills, Ont.

Oelrich, Wm. L.
Norfolk, VA
Card. & Int. Med.

Pearlman, Mark
Bethesda, MD

Pehlke, Michael
Bellevue, WA

Perry, H.B.

Peterson, John M.
Moline, IL

Powell, Robert
Arln'tn H'gts, IL
Psy & Hist of Med

Rausch, Curt N.
Gainesville, FL
Hem -Onc.

Rhodes, Glen R.
Albany, NY

Rixse, Robert S.
Alexandria, VA

Robison, George
Austin, TX
Internal Medicine

Sanders, L.A.

Schiff, Richard
Merina Rey, CA
Pediatrics

Schmidt, Philip
Rantoul, IL
Ob.-Gyn.

Serwer, Gerald A.
Durham, NC
Pediatric Card.

Shangold, Mona M.
Bronx, NY
Ob-Gyn, Rep. Endo

Sides, Paul J.
Durham, NC

Somers, W.A.

Spaulding, Jean
Durham, NC
Child Psychiatry

Starr, John W.
Roanoke, VA
Cardiology

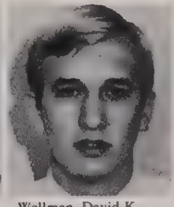
Taylor, Harvey G.
Tacoma, WA

Butts, Nancy J.
Durham, NC
Child & Ad Psy

Tschang, Tai-Po
Beaumont, TX
Pathology

Weisiger, Richard
St. Louis, MO

Welch, Nancy M.
Arvada, CO


Wellman, David K.
Durham, NC
Gen. & Vas. Surg

Wheeler, Clifton
Lakeland, FL

ALSO GRADUATING WITH THIS CLASS

Benson, Dudley W.
Durham, NC

Brown, Samuel B.
Atlanta, GA
Psychiatry

ALSO GRADUATING WITH THIS CLASS

Buckman, Robert
Hagerstown, MD

Dyer, Allen R.
Durham, NC
Psychiatry

Hoverman, Isabel
Durham, NC

Widness, John A.
Providence, RI
Pediatrics

Willis, John K.
New Orleans, LA
Pediatric Neur.

Wilson, Jeffrey
Lynchburg, VA
Int. Med.-Rheum.

Wittig, John W.
Los Angeles, CA
Card. Surgery

Woodhall, Philip
Atlanta, GA
Emergency Med.

ALSO GRADUATING WITH THIS CLASS

Jensen, Christian
Denton, MD
Family Practice

Lake, Charles R.
Bethesda, MD

Luger, Alan M.
Columbia, MO
Pathology

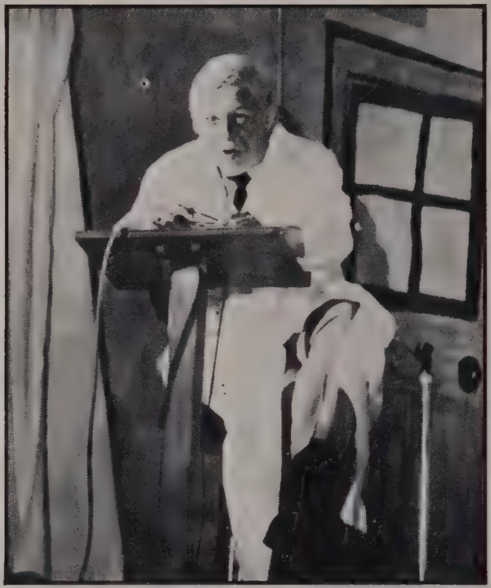
ALSO GRADUATING WITH THIS CLASS

Ryan, Paul F.
San Bernadino, CA
Cardiology

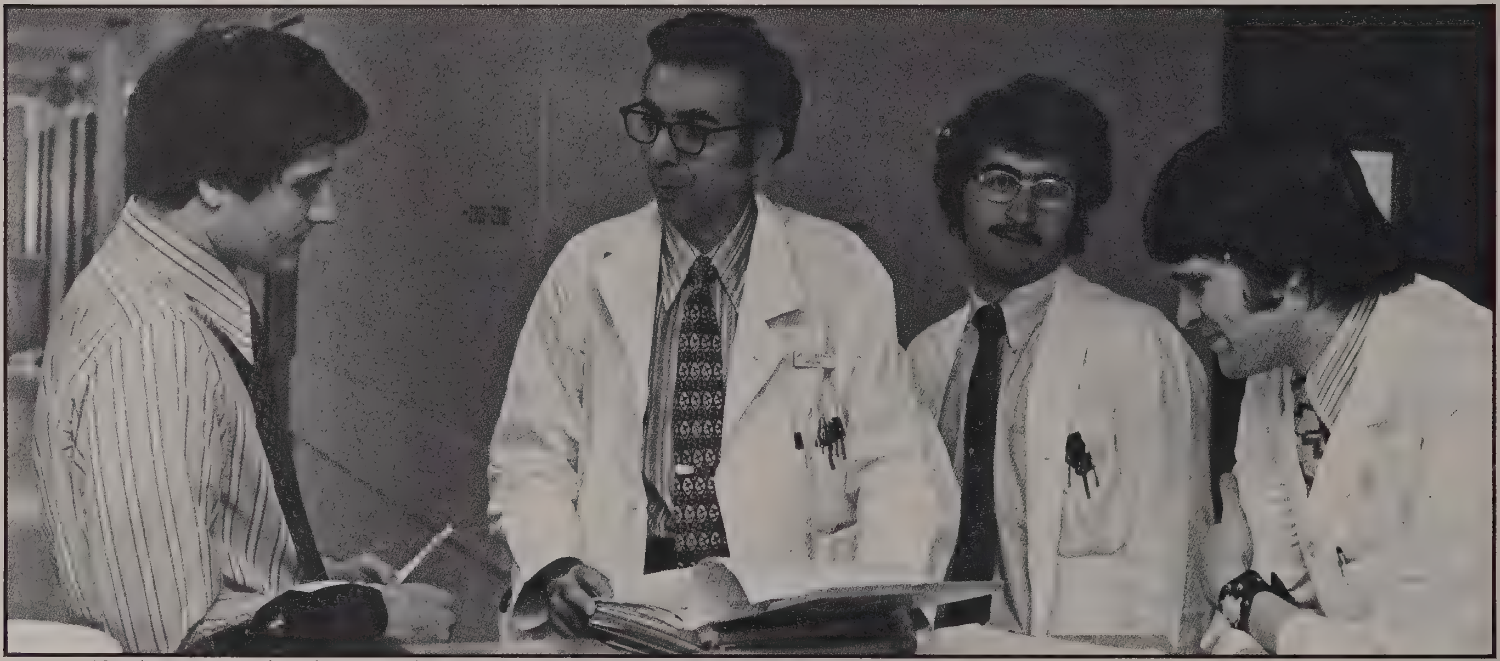
Singal, Sarah S.
New Orleans, LA
Internal Medicine

Thompson, James
Athens, GA
Internal Medicine

D. Andersen and Friend, 1971



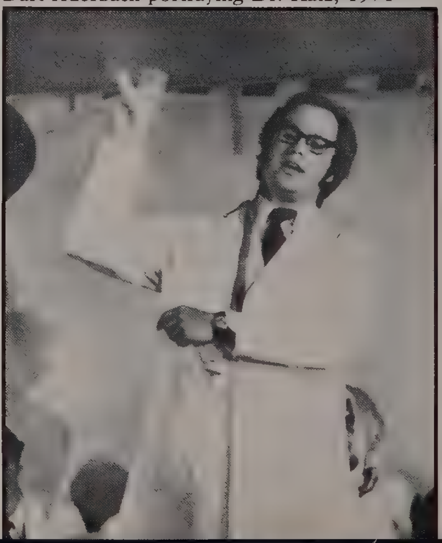
Dana Andersen portraying Dr. Kinney, Med School Show, circa 1971



Dr. Harold Silberman, sans beard, with students, about 1971

Mona Shangold and Joe Corless, 1971

Burt Auerbach portraying Dr. Katz, 1971



ENTERING CLASS
OF 1969

Auerbach, Burt J.
Chicago, IL

Bermanzohn, Paul
Chapel Hill, NC

Benbow, John M.
Concord, NC
Pediatrics

Blumner, J.

Cahill, J. David
Great Falls, MT
Anesthesiology

Chatterton, H.T.
Ladysmith, WI
Family Medicine

Cole, Thomas C.
Huntsville, TX
General Practice

Collins, Donald
Middleton, WI
Ob.-Gyn.

Conley, Martin J.
Durham, NC
Cardiology

Cooke, D.B.

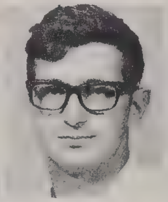
Coulam, Craig M.
Nashville, TN
Diagnostic Rad.

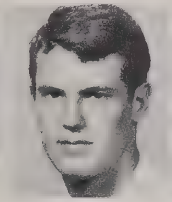
D'Angelo, Lawr.
Bethesda, MD
Internal Medicine

Ducore, Jonathan
Takoma Park, MD
Peds. Hem.-Onc.

Durham, George H.
Salt Lake City, UT
Pediatrics

Edwards, Keith R.
Bennington, VT


Eisenbarth, Geo.
Durham, NC
Internal Medicine


Ellett, James W.
Durham, NC

English, Peter C.
Durham, NC
Pediatrics

Eyler, M.E.

Flickinger, Ed.
Westlake, OH
General Surgery

Frost, Richard B.
Lexington, KY

Gnepp, Douglas R.
Morgantown, WV
Anat Path-Lym Res

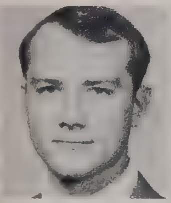
Gordon, Richard
Seattle, WA

Grauerholz, John
Providence, RI
Forensic Path.

Hallett, John W.
Wellesley, MA
Gen. & Vas. Surg

Hanes, J.C., Jr.

Hardaker, Wm. T.
Durham, NC


Hartwig, Geoffrey
Durham, NC
Neurology

Hibler, Thomas
New York, NY

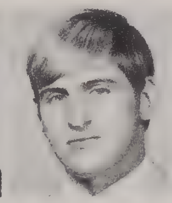
Hopkins, Elwood
Alameda, CA
Neurology

Joyner, Ronald W.
Iowa City, IA

Kahler, Stephen
Chapel Hill, NC
Genetics-Metab.

Karp, Daniel D.
Belmont, MA
Hem.-Onc.

Kidd, John Gray
Lynnfield, MA


Klaphaak, P.J.

Kline, Lanning B.
Montreal, Quebec

Krause, R.A.

Lawrason, Peter
Cumberl'd Ctr, ME
Ob-Gyn.

Limbird, Thomas
Nashville, TN
Orthopaedic Surg.

Lothman, Eric W.
St. Louis, MO
Neurology

Lowell, Seth H.
Ormond Beach, FL
Otolaryngology

Maier, Ronald V.
Solona Beach, CA
General Surgery

Marion, Richard
Winston-Salem, NC
Ophth. Oculo-Plas

Martin, Scott A.
Clayton, MD
Anatomic Path

Mason, David H.
Bethesda, MD

McConaughy, Robt.
Ann Arbor, MI
Psy. & Child Psy.

Quinn, Dianne K.
Philadelphia, PA
Pathology

McLean, George W.
Nashville, TN
Int. Med. — Endo

McNeer, Frederick
Tulsa, OK

Miller, Joseph M.
Mt. Pleasant, SC
Ob.-Gyn.

Moss, Jonathan
Belmont, MA
Anesthesiology

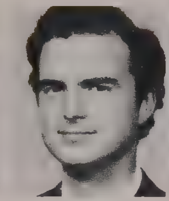
Nagey, David A.
Durham, NC
Ob.-Gyn.

Nathan, Michael
Durham, NC
Pediatrics

Newman, Glenn E.
Durham, NC
Radiology

Norris, David A.
Columbus, OH

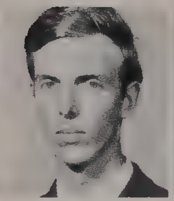
Ostdahl, Roger
Mechanicsburg, PA
Neurosurgery


Quinn, Graham E.
Philadelphia, PA
Pediatric Ophth.

Raizes, Gary S.
Scarsdale, NY
Cardiology

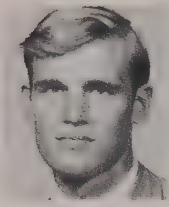
Raugi, Gregory J.
Portland, OR
Dermatology

Rendall, John L.
Greensboro, NC
Orthopaedic Surg.

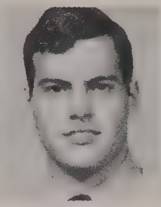

Robinson, Stuart
Durham, NC
Gastroenterology

Rosenblitt, Don.
Durham, NC
Psychiatry

Rosenblum, J.

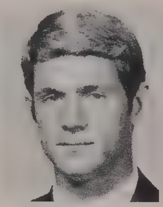

Sarn, James Edw.
New York, NY

Scherer, Charles
New Brunswick, NJ


Schroeder, Terry
Anderson, SC
Gen. & Vasc. Sur.

Shaw, Dale R.
Cary, NC
Diagnostic Rad.

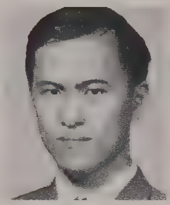
Simon, Richard
San Francisco, CA


Slade, Clement L.
Rockville, MD
Plastic Surgery

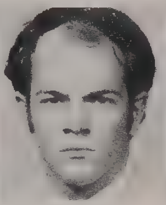
Sneiderman, C.A.
Wheaton, MD
Family Practice

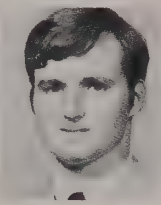
Solovieff, Greg.
Chapel Hill, NC
Family Practice

Strittmatter, W.
Durham, NC

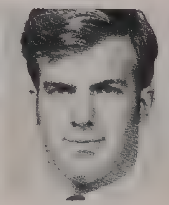

Sung, Chung-Shin
Houston, TX
Cardiology

Talmadge, John
Conroe, TX
Psychiatry


Taylor, Lloyd M.
San Francisco, CA


Thomas Cornelius
Bethesda, MD

Walther, Philip
Northridge, CA
Urologic Surgery


Watson, Donald C.
Portola Va., CA
Cardiovasc. Surg.

Weiner, Richard
Durham, NC
Psychiatry

Wesly, Robert L.
Durham, NC
Thoracic Surgery

Wiener, Stephen
New York, NY

ALSO GRADUATING
WITH THIS CLASS

Freed, Marcia
Portland, OR
Psy. & Child Psy.

Pilot, Mitchell
Atlanta, GA

Williams, Wm. H.
Orangeburg, SC
Gen. & Vasc. Sur.

Wilson, Joanne
Ann Arbor, MI
Int. Med.-GE

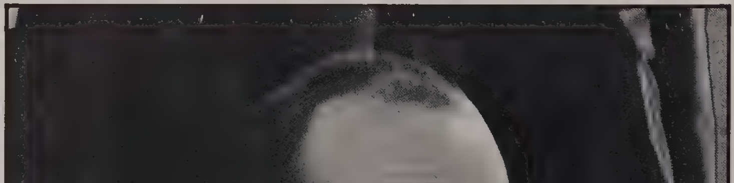
Zwelling, Leonard
Potomac, MD
Medical Oncology

ALSO GRADUATING
WITH THIS CLASS

Samuel, Edward T.
Stony Brook, NY
Hem.-Onc.

Schwartz, Jared
Charlotte, NC
Pathology

Shasby, Michael
Denver, CO


Bob Cassell (AKA Dr. Anlyan), 1970-1979

Neil Thomas '73 and unidentified person at Edgemont Clinic

ENTERING CLASS
OF 1970

Abernathy, J.L.

Africa, Bruce B.
Berekeley, CA
Psychiatry

Alexander, Leon
Durham, NC

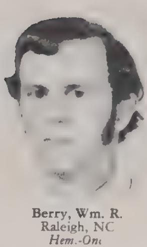
Allister, D.B.

Armfield, B.W.

Baber, Collins
Durham, NC
Diagnostic Rad.

Barham, James E.
Anderson, SC
Family Practice

Bateman, Alan L.
Brookline, MA
Psychiatry


Berry, Wm. R.
Raleigh, NC
Hem.-Onc

Blumhagen, Dan W.
Providence, RI

Board, Jaffrey
Fayetteville, NC
Ophthalmology

Brantley, Ingrid
Durham, NC
Adol-Child Psych

Broders, Albert
Dallas, TX

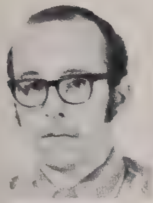
Brownlee, Michael
Watertown, MA

Burge, Joseph J.
Boston, MA

Burwell, J.C. III

Call, Newel B.
Los Angeles, CA

Carmichael, A.G.


Cassell, Robt. H.
Atlanta, GA
Internal Medicine

Chernys, Ann E.
Cleveland, OH

Cohen, M.L.

Cohen-Cole, Stev.
Chapel Hill, NC

Curl, Walton W.
West Point, NY
Ortho. Surgery

Cutler, Joshua
Chevy Chase, MD
Cardiology

David, Richard
Chicago, IL
Neonatology

Denton, James G.
Dallas, TX
Plastic Surgery

Dorsey, James S.
Durham, NC

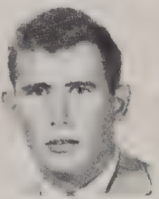
Downs, Robert W.
Chevy Chase, MD
Int. Med.-Endo.

Drawsbaugh, Edw.
Hagerstown, MD
Otolaryngology

Drysdale, Daniel
Blacksburg, MI
Opthalmology

Findlay, Wm. A.
Grand Junct., CO
Pediatrics

Fisher, Wm. S.
Winston-Salem, NC
Otolaryngology


Flowers, J.B.

Foster, Wm. L.
Chapel Hill, NC
Radiology

Garrett, Wm. E.
Durham, NC
Orthopaedics

Garson, Arthur
Houston, TX
Pediatric Card

Georgiade, Greg.
Durham, NC
Plastic Surgery

Gilbert, Robert
Atlanta, GA
Neurology

Gipson, Thomas
Columbia, MD

Goellner, Wm. E.
Miami, FL

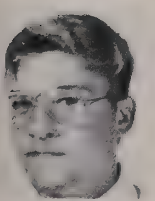
Goldner, Richard
Charlot'ville, VA

Goodenberger, D.
Boston, MA

Grulke, David C.
Norfolk, VA
Internal Medicine

Holton, Walter L.
Manteo, NC
Family Practice

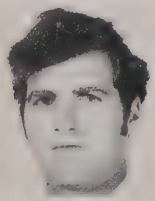
Hopkins, Richard
Durham, NC
Surgery


Jason, Casey J.
Oakland, CA
Pediatrics

Jones, Lanning
San Antonio, TX
Pediatrics

Keel, James F.
Durham, NC

Kehne, Barbara
Durham, NC


Koman, Andrew
Durham, NC
Ortho. Surgery

Kopelman, Richard
Quincy, MA
Internal Medicine

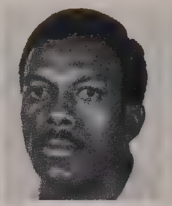
Leppert, Phyllis
Guilford, CT
Perinatology

Lester, Robert M.
Bethesda, MD
Cardiology

Lillydahl, Wm. C.
Boulder, CO
Otolaryngology

Lister, Eric D.
Boston, MA

Lloyd, Stephen C.
Columbia, SC
Internal Medicine

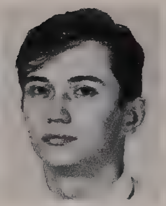

McCloud, W.

McDonald, John A.
Columbia, MD

Medlin, Douglas
Knoxville, TN

Miller, David E.
Durham, NC
Ob.-Gyn.

Mold, James W.
Chapel Hill, NC
Family Practice


Nadas, John A.
Chicago, IL

Nadell, Andrew
San Francisco, CA
Psychiatry

Newman, Walter
Durham, NC
Internal Medicine

Paris, Steven A.
So. Easton, MA
Pediatrics

Pass, Harvey Ira
Jackson, MS
Surgery

Perry, John C.
Belmont, MA
Psychiatry

Pierce, I.J.

Plumb, Vance J.
Homewood, AL
Cardiology

Porter, Wayne R.
Miami, FL

Powell, Berkeley
Houston, TX
Plastic Surgery

Pyles, Jerald D.
Hendersonv'le, NC
Internal Medicine

Rainey, Thomas
Potomac, MD
Int Med-Inten Car

Rosenthal, J.T.
Charlot'ville, VA

Rothstein, Manfr.
Fayetteville, NC
Dermatology

Sanfilippo, A.P.
Durham, NC
Pathology

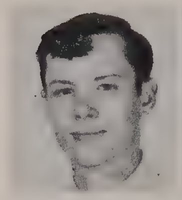
Sateia, Michael
Norwich, VT
Psychiatry

Schocken, Douglas
Durham, NC
Cardiology

Scott, John Glenn
Batesville, AR
Family Practice

Shipley, Michael
Durham, NC
Int. Med., G.E.

Simrel, Kermit O.
Washington, DC
Pediatrics


Skarin, Robert
Arlington, VA
Pediatrics

Spector, Arthur
New Haven, CT
Ob.-Gyn.

Spray, Thomas L.
Durham, NC
Cardiac Surgery

Stead, Wm. W.
Durham, NC
Nephrology

Strohmeyer, Ger.
San Antonio, TX

Stulting, Robert
Miami, FL
Ophthalmology

Tager, Mark J.
Portland, OR
Dir of Hlth Promo

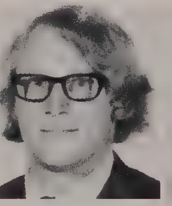
Teutsch, Steven
Atlanta, GA
Epidemiology

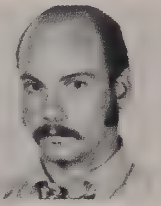
Thistlethwaite, J.
Wahsington, DC

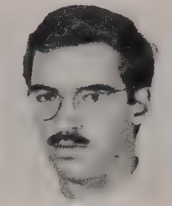
Thompson, Charlo.
Durham, NC

Todd, Robert F.
Brookline, MA

Tokarski, E.


Troxler, David
Gaithersburg, MD
Medical Research


Walters, David
Canton, MA
General Surgery


Waugaman, Richard
Potomac, MD
Psychiatry

Weeks, Kenneth D.
Bethesda, MD
Cardiology

Wiley, Jerry Wm.
Raleigh, NC
Pediatrics

Williams, Eddie
Durham, NC

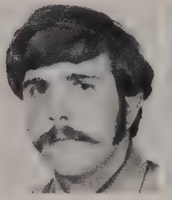
ALSO GRADUATING WITH THIS CLASS

Casagrande, Sandr
San Diego, CA

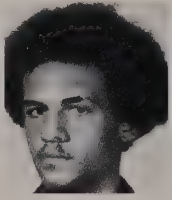
Faeder, Isabelle
San Francisco, CA

Norcross, Wm. A.
San Diego, CA
Family Medicine

Williams, Linda
New York, NY


Williams, R.S.

Wolff, Bruce G.
New York, NY
General Surgery


Yancey, Michael
Durham, NC

Zellinger, Mich.
Ann Arbor, MI

ALSO GRADUATING WITH THIS CLASS

Poeschel, Bernard
Durham, NC

Richardson, David
Lumberton, NC

Rosenblitt, Daph.
Durham, NC
Child-Adol Psych

Williams, Lewis
Arlington, MA
Internal Medicine

We "War Babies" got to Duke Medical School in the early '70's, when major changes were occurring in medical education. There was the pass-fail system, thank goodness. The Core Curriculum was firmly established and made the early years fast and furious, but the later years fun. The school enjoyed a sterling reputation which attracted bright and competitive students. The basic science departments were so large that we couldn't know our professors well, but many of them wrote or edited the texts we used. Also our numbers were the largest ever, and three students shared a cadaver in anatomy lab, a cat in physiology and a brain in neuro. But you always had one human arm vein to needle (with the new space-age vacutainer), and that belonged to your lab partner; "Push in 'til he screams, then draw back 'til you get something red!"

There were Saturday classes, small group sessions at home on weekends, programmed texts, and tutors if you slipped. But there remained crash courses in neuro, genetics, physical diagnosis, with no time to rest except for the wonderful sleep with the lights off in histology lectures or with the lights on in biochemistry until Dr. Hill threw the chalk. There was a language barrier to overcome, too. From Dr. Narahashi we heard of "sweet grands" and their "hexocrine function". From Dr. Clapp we learned of body "flurids" and the production of "u-run". And of course, Dr. Wachil passed out some "sheet" every day.

There were also many student candidates for M.D.-Ph.D. whom we called "Mud-Phuds". They made great tutors and objects of admiration, but they wrecked our curve on the National Boards Part I. However, some things we all had in common; we came home at night smelling like formaldehyde in the first year, like sweat in the second year, like melena in the third, but like a **rose** in the fourth. Getting to the end of the ordeal was sweet, especially when looking back.

Along the way there were unforgettable memories, such as:
— midnight rounds with Bruce Dixon
— morning coffee with Billy Peete
— any rounds with Mike McLeod
— doing a U/A and a Gram stain in the student lab with no glass slides
— confusing systole with diastole in auscultation
— seeing a reversible disease on the pediatric ward
— learning the "Box Method" of fluid and electrolytes
— a tracheostomy at Hartman's
— Dr. Robertson's humor
— Dr. Goree's lack of same
— diagnosing your wife as having a disease you just learned
— the Director's hour and a free steak
— Walt Curl's Sunday morning football on East Campus
— Wednesday night basketball and a second place intramural finish
— color-coded hallways but still getting lost
— The David Troxler Era school plays — singingest and cleverest (and cleanest) ever
— classmates with Phi Beta Kappa tie clasps
— the "midnight rider" on Long Ward
— operating with Dr. Sealy, or hearing Dr. Floyd take a history
— "Freebies" at the post office
— swinging by the chandelier at the class party
— a guy on the first row, first seat, named H.I. Pass
— lunch on the Quad, or in the Gardens, or at the Oak Room
— hearing Dr. Sabiston introduce a guest lecturer for half the hour
— the yearly mini-test
— short white coats

Unidentified and Jay Cook, Student-Faculty Show, 1970

— Eastern N.C. patients with "high blood, low blood, and bad blood"
— reviewing an autopsy with Dr. Hackel

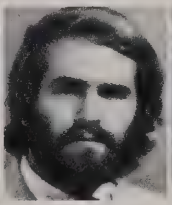
But then there were the exceptional highlights, such as:
— seeing one of the greats like Drs. Stead or Forbus or Smith make a comment at Grand Rounds
— presenting a case to Dr. Osterhout
— reviewing a film with Dr. Baylin
— seeing Dr. Goldner simulate disorders of ambulation
— hearing Dr. Orgain describe a case of rheumatic fever
— sitting in the Saturday CPC and suddenly beginning to understand what they are talking about
— getting a 14-gauge IV in a veteran
— dreaming of wearing white pants
— striving for Honors in Medicine
— seeing Dr. Kempner in his blue and white
— having Dr. Sabiston remember you name at a party, and your wife's name and your home town, and . . .

Well, this was a little of Duke Medical School in the early '70's. The education we received was worth the struggle, and the memories have proved indelible.

Ken Weeks, Jr., M.D. '74

ENTERING CLASS OF 1971

Agner, Roy Chris.
Salisbury, NC
Internal Medicine


Allison, James
Columbia, SC

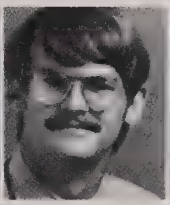
Andrew, Louise B.
Towson, MD
Int Med-Emer Med

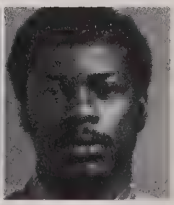
Area, Leandro C.
Hillsborough, NC

Arnold, Kristian
S. Portland, ME
Fam. & Emer. Med

Austin, Robert M.
Bethesda, MD

Baker, Elizabeth
Mt. Pleasant, SC
Reprod Endo & Ob


Ball, Robert M.
Dallas, TX


Barnes, Larry
Youngstown, OH

Beardsley, George
New Haven, CT

Becker, Matthew
Bethesda, MD
Anesthesiology

Bolander, Frank.
Bethesda, MD

Bonin, Andrew A.
Encino, CA
Family Practice

Bonner, Ernest L.
Gaffney, SC

Borowitz, Michael
Durham, NC
Pathology

Bousquet, Frank
Boston, MA

Boyd, James F.
Augusta, GA
Oncology

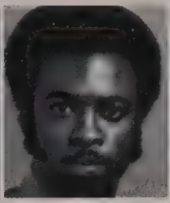
Brady, Charles E.
Robbins, NC

Brown, J.S.

Butler, Stephen
Roseboro, NC

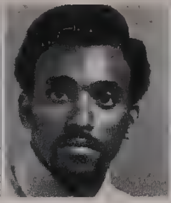
Campbell, Wm. K.
Asheville, NC
Family Practice

Capello, Roger W.
Ashland, VA
Internal Medicine


Cahmbers, J.W.

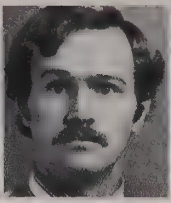
Clayton, Linda
Durham, NC
Ob.-Gyn.

Glegg, Herbert W.
Chestnut Hill, MA
Pediatrics


Coleman, Arnett
Butner, NC

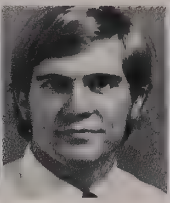
Cordingley, Gary
Riverdale, NY
Neurology

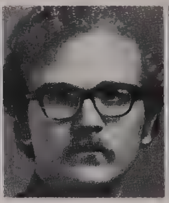
Davis, Alan Dean
Knoxville, TN

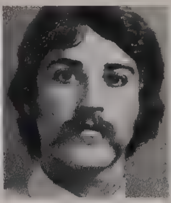

Donohue, Hugh J.
Tacoma, WA
General Surgery

Dorminy, John H.
Durham, NC

Draffin, Richard
Savannah, GA
Pathology


Drake, R.E., Jr.


Durham, D.A.


Eiden, Joseh J.
Richmond, VA
Clinical Micro

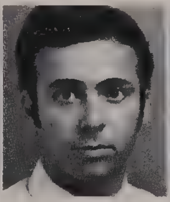
Fields, Richard
Greensboro, NC
Psychiatry

Forciea, Mary Ann
Minneapolis, MN
Internal Medicine

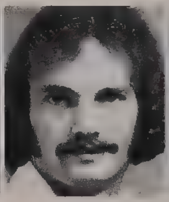
Fortune, John B.
Albany, NY
Surgery

Fouts, Anthony C.
Meridian, MS
Internal Medicine

Fries, Louis F.
Ellicott City, MD
Internal Medicine


Fromer, Carl
San Fran, CA

Gober, H. Fred
Gainesville, GA
Ob-Gyn.


Goodkind, David
Brookline, MA
Plastic Surgery

Graham, Suzanne
Lexington, KY
Pathology

Gross, W.

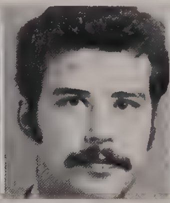
Harvey, Robert C.
Olympia, WA

Hawley, Philip C.
Columbus, OH
Internist

Hess, Davis S.
Durham, NC

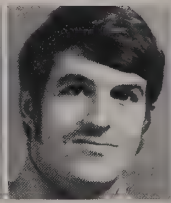
Arey, Jo Ann H.
Galax, VA
Family Practice

Humphrey, John E.
Bat Cave, NC
Psychiatry


Janczewski, M.J.

Jarvis, Stuart
Columbus, OH

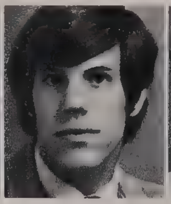
McLean, Susan J.
Nashville, TN
Pediatrics

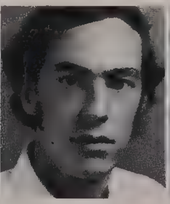

Johnston, Wm. E.
Natick, MA

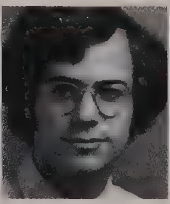
Joiner, C.H.

Josephs, Shelby
Silver Spring, MD
Pediatrics

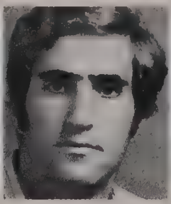
Kahn, Robert Ira
Mill Valley, CA
Urology


Kapsch, Donald N.
Columbia, MD
Gen. & Thor. Sur.


Kessler, Allen R.
Nashville, TN
General Surgery

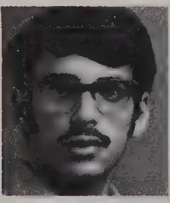

Khoury, Chris
Aurora, CO

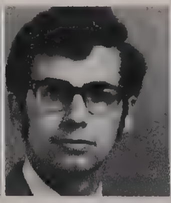
Kleinerman, G.

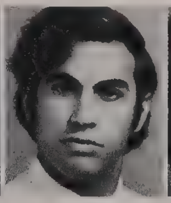

Lang, Laurence A.
Sherman Oaks, CA
Anesthesiology

Larson, Richard
Durham, NC

Lhotsky, Dora M.
Greensboro, NC


Lober, Clifford
Rochester, MN


MacIntosh, Victor
Boston, MA


Manners, R.E.

Marlow, Michele
Chipley, FL

McCarley, Dean L.
Gainesville, FL
Internal Medicine

McCarty, Gale A.
Durham, NC
Rheumatology

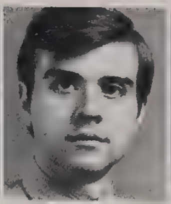
Mellon, M.T.

Miller, Michael
Goffstown, NH
Radiology

Moore, Benjamin
Durham, NC
Neuropsychiatry

Moore, Reginald
August, GA

Muller, Thomas W.
Washington, DC
Anesthesiology



Novak, Robert W.
Memphis, TN
Pediatric Path

Ose, Wendy Elise
Raleigh, NC
Psychiatry

Paulson, Jerome
Baltimore, MD

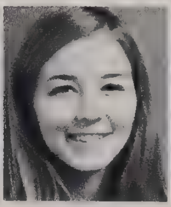
Novak, Pamela E.
Memphis, TN
Pediatrics

Pfister, Wm. C.
Tifton, GA
Pathology

Phillips, Harry
Boston, MA
Cardiology

Poston, Wm. M
Boston, MA

Priour, H. Larry
Ingram, TX
Ob.-Gyn.



Reid, Barbara S.
Houston, TX
Pediatrics

Rhoads, Edward J.
Durham, NC
Psychiatry

Richardson, C.

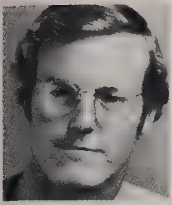
Richardson, D.L.

Robinson, Charles
Boston, MA
Ophthalmology

Rockson, Stanley
Brookline, MA
Cardiology

Schenk, Sandy
Durham, NC
General Surgery

Simpson, John B.
Menlo Park, CA
Cardiology



Singer, F. Philip
Hillsborough, NC
Family Medicine

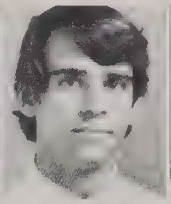
Singletary, Wm. V.
Durham, NC

Snyder, David W.
St. Louis, MO

Stansbury, S.W.
Louisville, KY

Steele, J.C.H.

Stoughton, Ned S.
Long Beach, CA
Dermatology



Stubbs, Thomas M.
Annapolis, MD
Ob.-Gyn.

Tatum, Arthur H.
Durham, NC
Pathology

Tift, Jerome P.
Chapel Hill, NC
Forensic Path

ALSO GRADUATING WITH THIS CLASS

Adams, Brown
Riverdale, NY
Ob.-Gyn.

Clements, Fiona
Redlands, CA

Toher, Raymond J.
Durham, NC
Internal Medicine

Westby, Steven
Fort Difienace, AZ

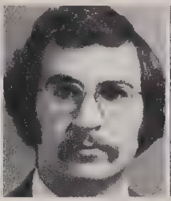
Wilkerson, Steph.
Durham, NC

ALSO GRADUATING WITH THIS CLASS

Hansen, Dorothy
Tallahassee, FL
Pediatrics

Jobin, Michael
Denver, CO
Emergency Med.

Williams, Robert
Bremerton, WA



Wojeski, William
New York, NY
General Surgery

Zaino, Richard
Durham, NC

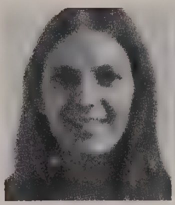
ALSO GRADUATING WITH THIS CLASS

Zwelling, Eugenie
Potomac, MD
Peds. & Immuno.

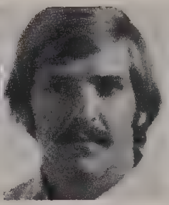
Scheinberg, Rich.
Wichester, MA
Ortho. Surgery

L to R: M. Fendt, L.B. Andrew, Galen Andrew and C.G. Andrew, ca. 1975

ENTERING CLASS
OF 1972


Allen, Faith
New York, NY

Arentzen, Carl
Wayzata, MN
Cardiovasc. Surg.


Ballard, Evan A.
Jonesville, NC
Family Practice

Beauchamp, C.O.
Ann Arbor, MI
Internal Medicine

Beaumont, Ralph
Denver, CO
Psychiatry

Becker, R.L., Jr.

Beekman, Robert
Ypsilanti, MI
Ped. Cardiology

Berger, Keith E.
Durham, NC

Bergin, D.J.

Bilsker, Martin
Bronx, NY
Cardiology

Blaylock, Barbara
San Diego, CA

Brown, Michael A.
Gainesville, FL
Internal Medicine

Bundy, Ralph L.
San Francisco, CA

Cannon, David R.
Fairfield, CT

Carlson, D.A.

Caudill, Lucy H.
Charleston, WV
Psychiatry

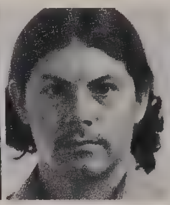
Cheesborough, J.
Chapel Hill, NC
Dermatology

Collins, D.

Cooke, James H.
Fayetteville, NC
Internal Medicine

Crain, B.J.

Creagan, S.M.


Crigler, Norris
Charlot'vle, VA
Radiology

Dae, Michael W.
Raleigh, NC

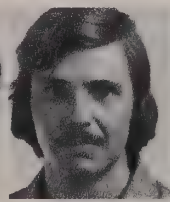
Davies, Michael
Oakland, CA

Dixson, George R.
Durham, NC
Radiology

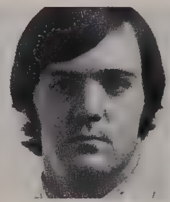
Dunn, Philip H.
Durham, NC
Hem.-Onc.

Edgar, J.R.

Eubank, Daniel F.
Concord, NH
Family Medicine


Fedor, John M.
Durham, NC
Internal Medicine

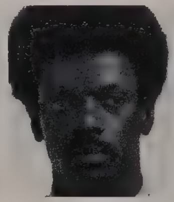
Fisher, S.R.


Fitch, Robert D.
Durham, NC
Orthopaedic Surg.

Forth, Richard
Roanoke, VA
Ob.-Gyn.

Friedman, Gregg
Chapel Hill, NC

Galentine, Paul
Bethesda, MD
Ophthalmology


Geer, M.R.

Gellerstedt, M.E.

Gentry, Robert E.
Nashville, TN

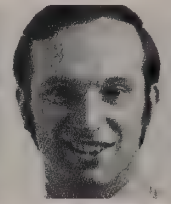
Geisker, David
W. Hartford, CT
Pathology

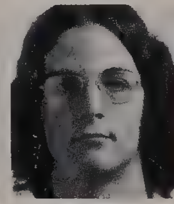
Hanberry, Richard
Macon, GA

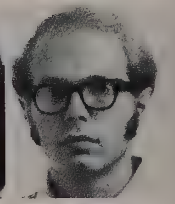
Herr, Douglas V.
Pittsburgh, PA
Internal Medicine

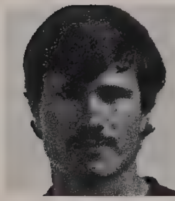
Herr, Bonnie
Pittsburgh, PA
Ob.-Gyn.

Hull, Keith L.
Durham, NC
Neurology

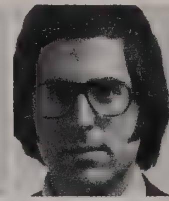

Hunter, John Dane
Durham, NC
Internal Medicine


Jacob, Andrew S.
Boston, MA

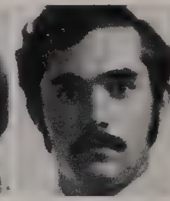

Johnston, M.F.


Jones, John W.
Claremore, OK

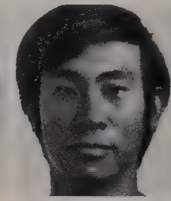
Jones, Roy B.
Gaithersburg, MD
Medical Oncology


Kalman, Leonard
Philadelphia, PA
Internal Medicine

Keller, Ted S.
Ypsilanti, MI
Neurosurgery

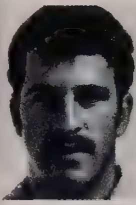

Kilpatrick, R.J.

Kincaid, Stuart
San Francisco, CA
Orthopaedic Surg.


King, G.L.

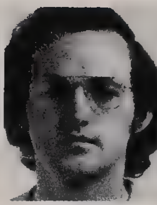
Koon, Richard E.
Dunbar, WV

Korngut, Irwin S.
Richardson, TX


Krauth, L.E.

Lamb, Robert V.
Houston, TX

Lambert, P.R.


Lambeth, J.D.

Leider, Karen
New York, NY

Lesesne, Bancroft
Spartanburg, SC
Internal Medicine

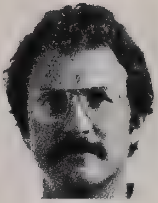
Lies, Stephen C.
Durham, NC
Ob.-Gyn.

Lipscomb, Robert
Denver, CO
Orthopaedic Surg.

Livengood, C.H.
Durham, NC
Ob.-Gyn.

Luikart, S.L.D.

Manning, Stuart
Durham, NC
Internal Medicine


Marquardt, J.D.

Marshall, J.I.

McCracken, J.S.

McKee, Heather C.
Rochester, NY

Mickey, John Vick
Honolulu, HI
Internal Medicine

Miller, York E.
Denver, CO
Pulmonary

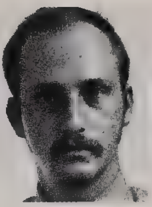
Mitchell, J.M.

Morgan, A. Dean
Sherman, TX
Internal Medicine

Murray, John C.
Durham, NC
Dermatology

Neal, John Wm.
Hamlet, NC
Family Medicine

Nicholson, B.W.
Chapel Hill, NC


Olshan, Arthur, R.
San Diego, CA

Papadopoulos, D.

Parsons, James T.
Gainesville, FL

Perler, Bruce A.
N. Dartmouth, MA
Surgery

Piech, K.S.

Podolsky, Susan
Durham, NC

Polisson, Richard
Kensington, MD
Internal Medicine

Robertson, Dwight
Mt. Pleasant, SC

Roden, Wm. C.
Old Hickory, TN
Orthopaedic Surg.

Savage, Robert M.
San Diego, CA

Schlossman, D.M.

Schultz, D.J.

Scoggins, Bernard
Decatur, GA
Internal Medicine

Sharp, G.H.

Shaw, Robert A.
Columbus, OH
Pulmonary Med.

Singler, Robert
Seattle, WA
Anesthesiology

Stein, R.B.

Swetenburg, Ray
Charlotte, NC
Pediatrics

Tannenbaum, Sig.
Durham, NC
Urology

Tate, Robert M.
Denver, CO
Pulmonary Med.

Treadwell, Edward
Garland, NC

Unger, Stephen W.
Charlot'vle, VA
Surgery

Upchurch, Kath.
Cambridge, MA

Vanbenthuysen, K.
Denver, CO

Vick, G.W., III

Vincent, Michael
Rockville, MD
General Surgery

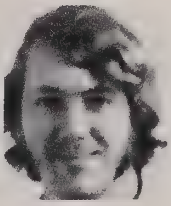
Webb, Mary Sharon
Alexandria, VA

Weinstein, P.

Whitaker, Willie
Columbia, SC

Whitesides, Dan
Durham, NC
Ob.-Gyn.

Whitlow, Patrick
Atlanta, GA


Williams, R., Jr.

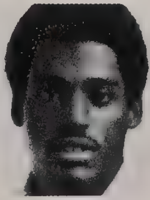
LSO GRADUATING WITH THIS CLASS

Bevan, Mark F.
Irving, TX

Conn, Eric H.
Durham, NC
Cardiology

Williams, R.L.

Williford, Marg.
Lillington, NC

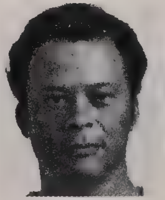

Woods, Gerald M.
Hazelcrest, IL

ALSO GRADUATING WITH THIS CLASS

Dimming, Thomas
Durham, NC
Emergency Med.

Epstein, Arnold
Pembroke P'ns, FL

Freemark, Michael
Durham, NC
Pediatrics


Woriax, Frank
Durham, NC

Zack, Brian Gary
Cincinnati, OH
Ped. & Adol. Med.

Ziegler, R.E.

ALSO GRADUATING WITH THIS CLASS

Geehr, Edward C.
Largo, FL

Barnhill, Raymond
Many, LA
Dermatology

ENTERING CLASS OF 1973

Adams, Beverly J.
Durham, NC
Otolaryngology

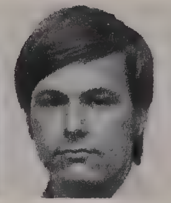
Calderwood, Susan
Camden, ME
Internal Medicine

Arthur, Martha
Reynoldsburg, OH

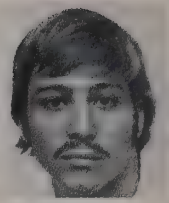
Auerbach, Paul S.
Los Angeles, CA
Emergency Med.

Austin, Linda
Bethesda, MD

Bailey, Kathleen
Chicago, IL
Internal Medicine


Barton, Thomas K.
Durham, NC
Pathology

Barger, Jerry J.
Gainesville, FL


Bernstein, Barry
Columbus, OH

Bishop, Linda A.
Somerville, MA
Pediatrics

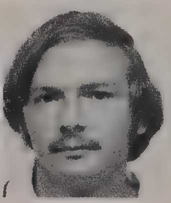
Blacharsh, Jill
Durham, NC
Psychiatry

Bloomfield, Robt.
Winston-Salem, NC
Internal Medicine

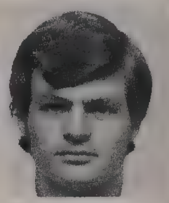
Boeck, Marjorie
Bronx, NY
Adolescent Med.

Bower, Andrea
San Bernadino, CA
Family Practice

Brennan, John T.
Charleston, SC
Family Practice


Bressler, Robert
Houston, TX
Internal Medicine

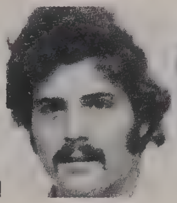
Bruce, James F.
Charlot'ville, VA
Ortho. Surgery


Buckley, Edward
Durham, NC
Ophthalmology

Drake, Patricia
Durham, NC
Pediatrics

Cassano, Wm. F.
St. Louis, MO
Pediatrics

Clark, Margaret
Col. Springs, CO

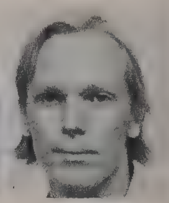

Conchi, Stephen
Dover, MA
Pediatrics

Dackis, Charles
New York, NY
Psychiatry

Drake, Miles
Durham, NC
Neurology

Dunningan, Ann C.
Richmond, VT

Duvic, Madeleine
Durham, NC
Dermatology


Dykes, James R.
Ashevelv, NC
Family Practice

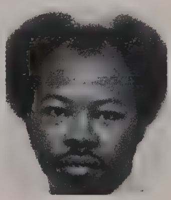
Ely, Ralph L.
Charlot'ville, VA

Fox, Gary N.
Charlotte, NC

Francis, Robert
Durham, NC
Surgery

Gallemore, Gail
Durham, NC
Pediatrics

Garcia-Saul, Jose
Durham, NC
Ob-Gyn.

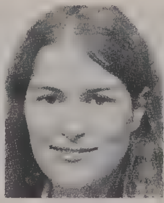

Gavin, James R.
St. Louis, MO
Internal Medicine

Gehrett, Joseph
Seattle, WA
Internal Medicine

Gilbert, Paul P.
Nashville, TN
Ortho. Surgery

Hagerty, Richard
Charleston, SC

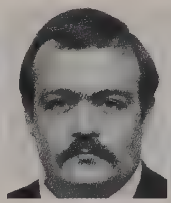
Hainline, B.E.
Durham, NC


Hainsworth, Barb.
Houston, TX

Hardy, Henry J.
Cleveland, OH

Harrington, M.M.
New Haven, CT

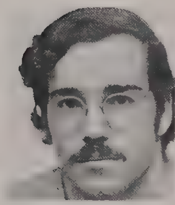
Harris, Larry C.
Durham, NC
Pediatrics


Hasson, Newton E.
Timonium, MD

Herman, G.E.

Holt, Lawrence B.
Winston-Salem, NC

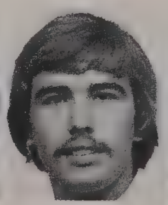
Honeycutt, P.J.
Durham, NC


Honickman, Steven
Watertown, MA
Radiology

LaFontaine, M.H.
Philadelphia, PA
Neurology

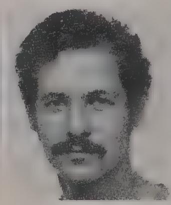
Horton, James M.
Gainesville, FL

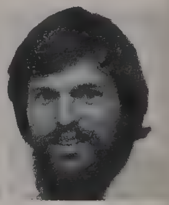
Hughes, C.L. Jr.
Durham, NC


Kennedy, John D.
Decatur, GA
General Surgery

Bassen, Cecile R.
Brookline, MA
Psychiatry

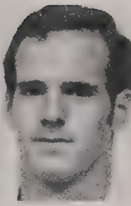
Klausner, Richard
Brookline, MA
Internal Medicine


Kull, Richard K.
Belmont, MA
Psychiatry


Larrick, James W.
Palo Alto, CA
Immun.-Int. Med.

Leggett, M.

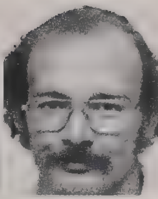
Leslie, John B.
Durham, NC
Anesthesiology



Lewis, Richard H.
Rockville, MD
Urology

Ling, David
Clayton, MI

Lymberis, Marvin
Winston-Salem, NC
Diagnostic Rad.

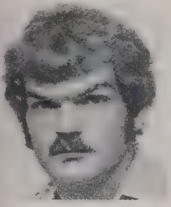


Mackey, Wm. C.
New York, NY

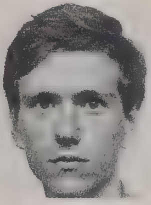
Magill, Michael
Durham, NC
Family Medicine

Mahony, Cheryl
Durham, NC
Internal Medicine

Mattil, C.L.

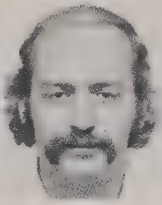


Mayer, Thom
Salt Lake Cty, UT
Pediatric Surgery



McGinnis, J. Jr.

McKain, Carey W.
Taylors, SC



Miller, Gary M.
Denver, CO
Pediatrics

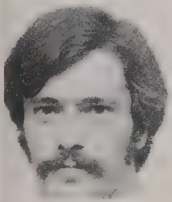
Millsaps, David
Charlotte, NC
Pediatrics

Moeller, G. Rad
Durham, NC
Int. Med.-Rheum.

Morawetz, Lida
Chapel Hill, NC
Psychiatry

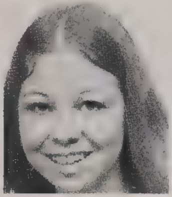
Myers-Budge, Bev
Durham, NC
Pathology

Nichol, Walter P.
Durham, NC



Ozimek, Carl D.
Westfield, NJ

Pasternak, Reuven
Carrboro, NC
Ped/Pub Hlth



Moeller, Wendy
Durham, NC
Int. Med.-G.E.

Pedley, Carolyn
Winston-Salem, NC
Internal Medicine

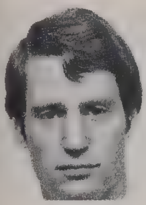
Spiro, Rhonda P.
Brooklyn, NY

Roberts, Wm. D.
Lancaster, PA

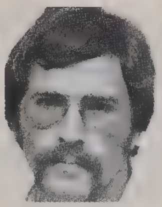
Roloson, G.J.

Rouault, Tracey
Durham, NC
Rheumatology

Rutledge, J.H.
Boston, MA
Law-Int. Med

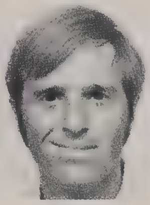


Sadler, J.E. III
Durham, NC
Biochem-Int Med

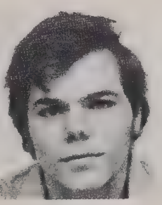


Schatz, Richard
San Francisco, CA
Internal Medicine

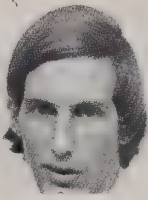
Scheinman, J.J.



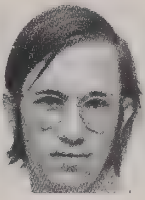
Sellers, Thomas
Durham, NC



Shoemaker, Ritch.
Chapel Hill, NC

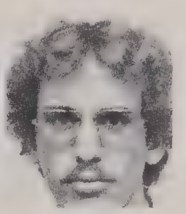


Smith, Chris E.
Durham, NC
Ortho. Surgery

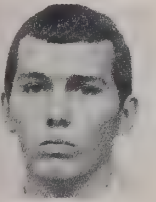


Smith, Peter K.
Durham, NC
Surgery

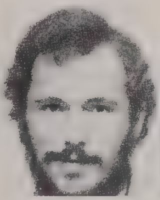
Smolko, Milan J.
San Diego, CA
Urology



Snow, Joseph r.
Seattle, WA



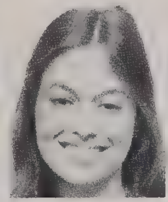
Stanley, Robert
Los Angeles, CA



Stewart, Dannie
Gallup, NM

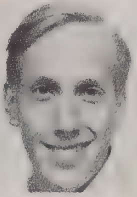
Stinson, Olivia
Chestnut Hill, MA
Pathology

Symmonds, Jeffrey
San Francisco, CA
General Surgery



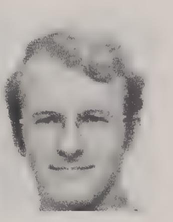
Lastinger, Linda
Chapel Hill, NC
Internal Medicine

Thaler, M.



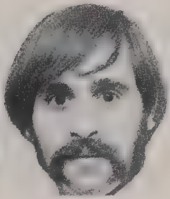
Thomassen, Thom
Silver Spring, MD
Ophthalmology

Ticehurst, John
Kensington, MD
Infectious Dis.



Trantham, Joel L.
Durham, NC
Internal Medicine

Trask, Neil W.
Dallas, TX
Internal Medicine



Trofatter, K. Jr.
Durham, NC
Pathology

Unterman, Terry
Evanston, IL
Internal Medicine

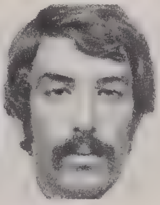
Waldrop, Charles
Madison, WI
Pediatrics

Walker, Price
Columbus, GA

Walls, Bertram E.
Durham, NC
Ob-Gyn

White, L.G.

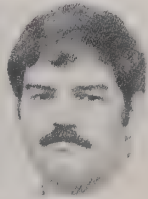
Hainline, Sarah
Durham, NC
Ob-Gyn



Williams, John M.
Durham, NC
Gen. & Thor. Sur

Williams, Larry
Salisbury, NC
Pediatrics

Williams, Jerome
St. Louis, MO
Internal Medicine



Willis, Henry S.
Andrews AFB, MD
Family Practice

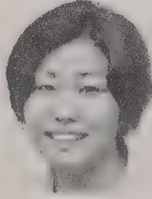
ALSO
GRADUATING
WITH THIS
CLASS

Keitel, Wendy A.
Durham, NC
Internal Medicine

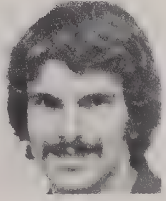
Palmeri, Barbara
Durham, NC
Psychiatry

Schmidt, Wm. F.
Philadelphia, PA
Hematology

Yen, T.S.



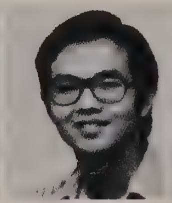
Yoshinaga, Monica
Salt Lake City, UT
Internal Medicine



Young, James A.
San Francisco, CA
Int. Med.-Onc.

ENTERING CLASS OF 1974

Alpert, Stephen
Philadelphia, PA
Pediatrics


Alyono, David
Minneapolis, MN
Surgery

Apple, Jerry S.
Durham, NC
Radiology

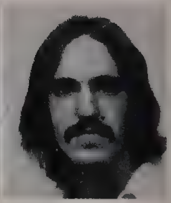
Avent, James M.
Salt Lake C'y, UT
Pathology

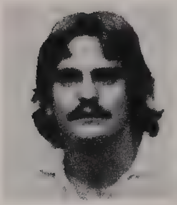
Bailey, Genie L.
Kenly, NC
Pediatrics

Bandy, Lawrence
Colubus, OH
Internal Medicine

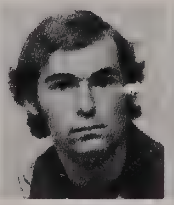
Beardsley, Thomas
Hanover, NH
Internal Medicine

Bell, William R.
Durham, NC
Pathology


Bencze, Robert F.
Fairfax, VA
Family Practice


Bible, Henry H.
Denver, CO
Psychiatry

Blair, Vilray P.
St. Louis, MO
Surgery

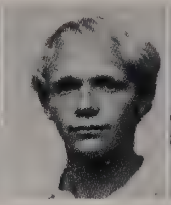

Bobbitt, Wm. H.
Denver, CO
Internal Medicine

Boekelheide, Kim
Chapel Hill, NC

Booth, Daniel H.
Salt Lake C'y, UT
Surgery

Bowman, Zebulon
Burlington, NC
Internal Medicine

Bredesen, Dale
Durham, NC
Internal Medicine

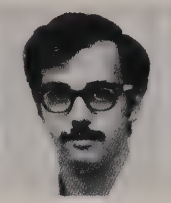

Bressler, Garrett
Gainesville, FL
Internal Medicine

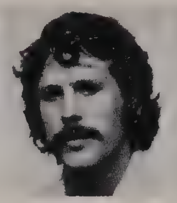
Buesing, Mary Ann
San Antonio, TX
Internal Medicine

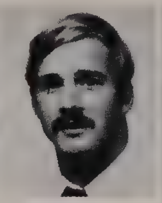
Buff, Samuel J.
Durham, NC
Radiology

Bull, Jonca C.
Washington, DC
Internal Medicine

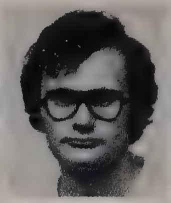
Bunn, William B.
Durham, NC
Internal Medicine


Butera, Philip J.
Brooklyn, NY
Internal Medicine


Califf, Robert
Durham, NC
Cardiology


Carey, Benjamin
Oakland, CA
Psychiatry

Clarke, William
Cincinnati, OH
Pediatrics


Cline, Wm. Tucker
New York, NY
Surgery

Conner, Patrick
Birmingham, AL
Internal Medicine

Cooper, John A.
Seattle, WA
Internal Medicine

Cooper, V.C.

Culp, John R.
Gainesville, FL
Internal Medicine

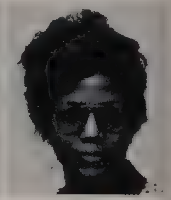
Cross, Phyllis D.
Charleston, WV
Family Practice

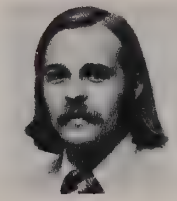
Dunlap, G.H.

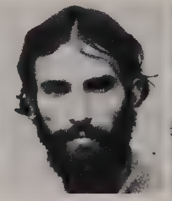
Dunn, ThaddeusL.
Nashville, TN
Internal Medicine

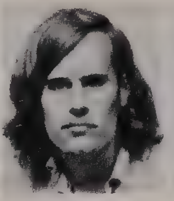
Edmundson, Marsha
Fayetteville, NC
Family Practice

Erickson, Douglas
Nashville, TN
Pathology


Ferguson, Elaine
Chicago, IL
Pediatrics


Freiberger, Harl.
Charleston, SC
Internal Medicine


Geballe, Adam P.
Chicago, IL
Internal Medicine

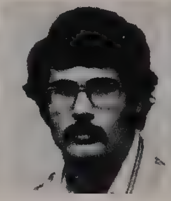

Gibson, William
Durham, NC
Pathology

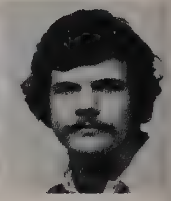
Ginsburg, David
Boston, MA
Internal Medicine

Gnann, John W.
Birmingham, AL
Internal Medicine

Goldberg, Joel S.
Chicago, IL
Internal Medicine

Peters-Golden, M.
Boston, MA
Internal Medicine


Gorman, Michael
Dallas, TX
Surgery

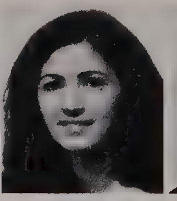

Graham, John D.
Ann Arbor, MI
Internal Medicine

Griffin, Eugene
Durham, NC
Family Practice

Groeneveld, Jod.
Milwaukee, WI
Internal Medicine

Hamp, Melissa
Pittsburgh, PA
Pediatrics

Hanson, Jeffrey
Denver, CO
Pediatrics

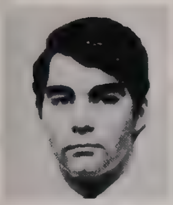

Harden, Elizabeth
Dallas, TX
Internal Medicine

Hassett, Alycia
Atlanta, GA
Internal Medicine

Hayes, Lynn
Chicago, IL
Ob.-Gyn.

Henderson, Joan
Boston, MA
Dermatology

Henderson, Melvin
Greenville, NC
Ob.-Gyn.



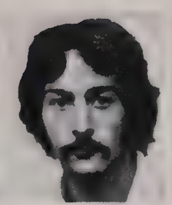
Hodge, Byron
Durham, NC
Urologic Surgery

Hoffman, Robert
Pittsburgh, PA
Internal Medicine

Hough, L.V.

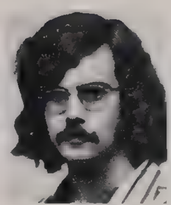
Isley, Joseph P.
Harrisburg, PA
Internal Medicine

Jackson, Marianne
Concord, MA



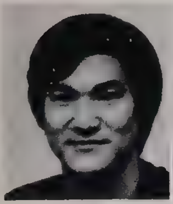
Johnson, Robert
Durham, NC
Dermatology

Johnson, Stephen
Birmingham, AL
Internal Medicine



Johnston, Jeffrey
Nashville, TN
Internal Medicine

Kelley, Susan L.
Denver, CO
Internal Medicine

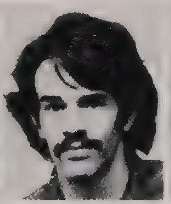


Li, J.T.
Jamaica, NY

Lieber, V.

Lightner, V.A.
Atlanta, GA

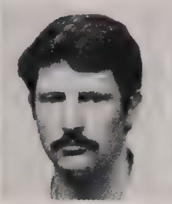
Lindsey, Peggy
Baltimore, MD
Ophthalmology



Lutin, Charles
Wilmington, DE
Family Practice

Mabry, Michael
Birmingham, AL
Internal Medicine

Mains, Charles
Denver, CO
Surgery



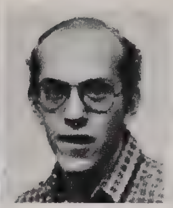
McClees, Eric
Durham, NC
Radiology

McIntosh, Donald
Nashville, TB
Internal Medicine

Mattil, C.L.

Morris, David C.
Col. Richland Co.
Family Practice

Budge, Beverly M.
Durham, NC
Pathology



Newman, Kurt
Boston, MA
Surgery

Newman, William
Durham, NC
Internal Medicine

Nielsen, Anton
Durham, NC
Internal Medicine

O'Brien, Lauren
Boston, MA
Pathology

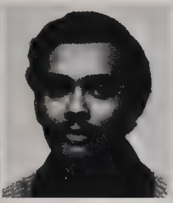
Plummer, Charles
Durham, NC
Anesthesiology

Preston, M.M.

Richard, Randall
Charleston, SC
Family Practice

Roark, Stephen
Durham, NC
Internal Medicine

Robb-Nicholson, L.
Boston, MA
Internal Medicine



Roberts, Alfred
Norfolk, VA
Ob.-Gyn.

Rothenburg, M.A.

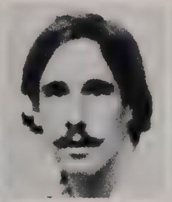
Wood, Pamela M.
Charlottesv'le, VA
Pediatrics

Sahmel, Reinhardt
Staten Island, NY

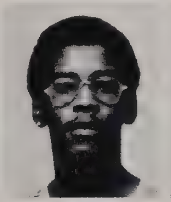
Savona, Steven R.
New York, NY
Internal Medicine

Schmidt, Emmett
Durham, NC

Sedwick, Lyn
San Antonio, TX
Ophthalmology



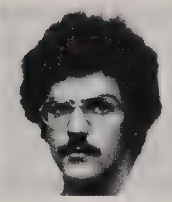
Sexton, Carlton
New Haven, CT
Radiology



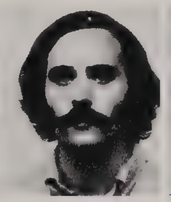
Shannon, Michael
St. Louis, MO
Pediatrics

Shelburne, Thomas
Durham, NC
Family Practice

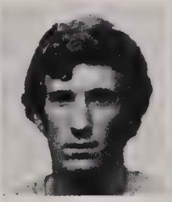
Shepard, Robert
W. Hempstead, NY
Oncology Research



Sherman, Douglas
Tallahassee, FL
Family Practice



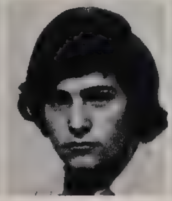
Shimm, David
Durham, NC
Internal Medicine



Simmons, Rob. D.
Miami, FL
Internal Medicine

Sims, P.J.

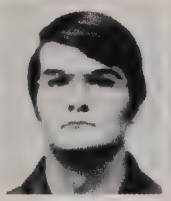
Smiley, Lynn
Durham, NC
Internal Medicine



Stern, Matthew B.
Philadelphia, PA
Neurology

Stockbridge, N.L.
Durham, NC

Suslavich, Frank
Durham, NC
Radiology



Swingle, Hanes
Boston, MA
Pediatrics

Taylor, Terry
Washington, DC
Internal Medicine

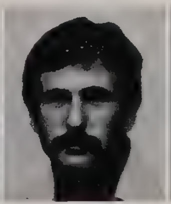
Tiedeman, James
Chapel Hill, NC
Peds-Int. Med.

Tiller, W. Howard
Durham, NC
Orthopedic Surg.

Suslavich, Cathy
Chapel Hill, NC
Radiology

Tyson, George
Durham, NC
Surgery

Vogel, Joseph.
New York, NY
Pathology



Wank, Stephen
Baltimore, MD
Internal Medicine

Williams, K.D.

ALSO
GRADUATING
WITH THIS
CLASS

Brantley, Bert
Durham, NC
Medicine

Colvard, David
Durham, NC

Douglas, James
Spartanburg, SC
Thoracic Surgery

Kincaid, Joan
San Francisco, CA
Ophthalmology

Wood, C.L.
Rochester, MN

Wood, Charles J.
Charlottesv'l, VA
Family Practice

Wright, Eugene
Durham, NC
Internal Medicine

Yoder, Eric
Charlottesv'l, VA
Family Practice

ALSO
GRADUATING
WITH THIS
CLASS

Williams, Lewis
Arlington, MA
Cardiology

Cheung, Joseph
Durham, NC
Internal Medicine

Dydek, Margaret
Durham, NC
Ob.-Gyn.

Lipton, Howard
Brookline, MA
Surgery

Myers, John L.
Cape Eliz., ME
Internal Medicine

Nord, Claire
Chapel Hill, NC
Psychiatry

Pozner, Linda
Rancho Pal. V., CA
Pediatrics

Shires, G. Thomas
Atlanta, GA
Surgery

As a member of the last graduating class of the 1970's, I would like to relate experiences which are common to all Duke graduates of all eras and experiences which are unique to a graduate of the '70's.

Like many of my classmates from northern metropolitan areas, the culture shock encountered those first few months in Durham was profound. For example, the distinct odor of tobacco, the Liggett & Myers factory, the tobacco fields, and such megalopolises as Fuquay-Varina and Carrboro all incited comparisons with their more cosmopolitan counterparts in the North. Of course, the inimitable North Carolinian accent (in contradistinction to the Alabamian, Georgian or Mississippian varieties) served as an ever constant reminder of our presence in the South.

In addition to the cultural differences with which one was confronted, a true sense of family was engendered from the onset of our Duke experience. Freshman orientation was highlighted by small dinner parties with upperclassmen who eased the apprehension of the medical school neophyte. Subsequent years brought invitations from Doctors Anlyan, Busse, Christakos, Bradford and many other faculty members who opened their homes to their extended family. I vividly recall one of my own visits at the summer cottage of Dr. Busse on Kerr Lake where I was unsuccessful at multiple attempts at water skiing. On another occasion, medical students found themselves skiing on the slopes of Beach Mountain — again courtesy of Dr. and Mrs. Busse and their four-wheel drive. These events, from a pigroast at the Vogel farm to a wine and cheese tasting festival at the Anlyan residence, reinforced the sense of family that binds all classes — from 1932 to the present.

However, certain phenomena were unique to particular classes, and the burgeoning of the Medical Center building program was just such a phenomenon. The Seeley G. Mudd Building, the Edwin L. Jones Cancer Research Building, the Duke Eye Center, the Edwin A. Morris Clinical Cancer Research Building, and of course, the fine structure we know as Duke North were all completed in the late 1970's. It was with great pride and excitement that we observed their inception and subsequent blossoming into the Medical Center we see today.

As a tribute to the Medical Center, its students and its lead-

As a tribute to the Medical Center, its students and its leadership, the *AESCULAPIAN* yearbook was reborn in 1978 after it had lain dormant for the previous six years. The yearbook project featured all classes, all departments, all administration leaders, and a myriad of other Duke-related subgroups. When I first considered reawakening the *AESCULAPIAN,* I did not realize the work which lay ahead, but the undertaking proved to be a learning experience for all. After interviewing prospective publishing firms, mailing over three hundred advertising solicitations, recruiting a staff, and raising in excess of $12,000, we were well on our way to producing the 1978 *AESCULAPIAN.* We received support from the small local corner store to the large multinational corporation. Not only was our ability to deal in matters of finance and business greatly expanded, but our literary and photographic skills were further developed. I say with confidence that those intimately involved with the production of the yearbook (especially John Lucas, Brad Ward, Bruce Schirmer, Juan Batlle and Eric Smith) consider this experience one of the highlights of their four years at Duke.

In summary, the medical student of the late 1970's resembled his predecessors in encountering the geographic and cultural characteristics of Durham and experiencing that bonding sense of family that persists in us all. Uniquely, the Duke medical student of the late '70's witnessed the materialization of a building program that is being emulated internationally. Dean Davison would have been proud! In addition, the publication and ultimate success of the 1978 *AESCULAPIAN* after a long period of dormancy provides yet another example of the diversification and the many talents of that entity known as the Duke medical student.

Anthony Limberakis, M.D. '79

Dr. Michael Uhde congratulating Dr. Thomas Uhde at the latter's wedding in 1978.

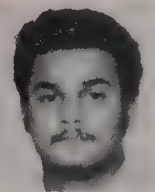
ENTERING CLASS OF 1975

Lucas, Marsha A.
Durham, NC

Adler, Stuart
Durham, NC

Alexander, C.M.
Chapel Hill, NC
Anesthesiology

Anderson, Scott
Durham, NC

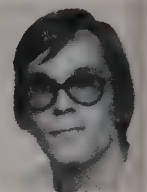


Baer, C.S.
Chapel Hill, NC
Family Practice

Bartels, George
Tallahassee, FL
Family Practice

Battle, Juan
Miami, FL
Ophthalmology

Bishopric, Nan.
Gainesville, FL
Internal Medicine

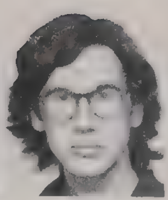


Blazey, Dale
Durham, NC

Bodner, Sara
Durham, NC
Pediatrics

Bounous, Phil
Durham, NC
Internal Medicine

Bradley, Betty L.
Fayetteville, NC
Family Practice


Brody, Gordon
New York, NY
Surgery

Browning, David

Burton, Skip
Durham, NC
Internal Medicine

Cappleman, Wm. F.
Winston-Salem, NC
Internal Medicine

Skell Cerf, V.
Charleston, SC
Family Practice

Chiu, Linda
San Francisco, CA
Psychiatry

Chua, Cynthia C.
Boston, MA
Internal Medicine

Colvard, David
Chapel Hill, NC
Surgery

Costel, Esther
Nashville, TN
Internal Medicine

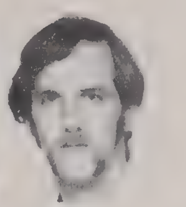
Craig, S.B.

D'Agati, V.D.

Dawkins, Jennings
Columbus, OH
Internal Medicine

Dealy, Darilyn
Charleston, SC
Internal Medicine

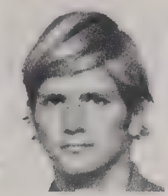
Douglas, James M.
Durham, NC
Surgery

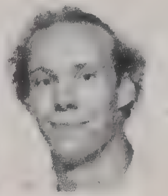

Dresser, Michael
Durham, NC

Drucker, Robert
Boston, MA
Pediatrics

Ebihara, Lisa
Durham, NC

Eisenson, Howard
Durham, NC
Family Practice


Eliasson, Arn H.
Birmingham, AL
Internal Medicine


Fath, John Jos.
Kalamazoo, MI
Trauma Surgery

Fitz, J. Gregory
U. of Ca. Hospital
Internal Medicine

Floyd, Richard D.
Durham, NC
Surgery

Foster, Jerry M.
Nashville, TN
Internal Medicine

Frazer, Jos. E.
Los Angeles, CA
Surgery

Gibbs, Verna C.
U. of Ca. Hospital
Surgery

Gordon, Jo C.
Los Angeles, CA
Surgery

Gospe, Sid M.
Durham, NC

Greenside, H.S.

Guyton, Jeannie
Nashville, TN
Internal Medicine

Hamm, Barbara L.
Birmingham, AL*Family Practice*

Harlan, J. Woody
U.S. Navy
Internal Medicine

Harris, Stuart I.

Harward, Timothy
Charlot'vle, VA
Surgery

Hathorn, James
Baltimore, MD
Internal Medicine

Heald, Peter W.
Durham, NC
Internal Medicine

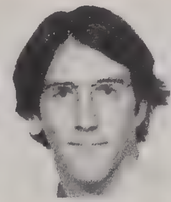
Higham, Margaret
Providence, RI
Pediatrics

Humphrey, Gary B.
Fairfield, CA
Family Practice

Hunt, Christopher
Charlot'ville, VA
Family Practice

Ishman, Reginald

Janick, Peter A.


Jonas, Wayne B.
New York, NY
Surgery

Jones, David C.
Chapel Hill, NC
Family Practice

Kahn, Edgar M.
Durham, NC
Psychiatry

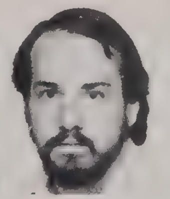
Kaufmann, Lisa
Philadelphia, PA
Internal Medicine

Lane, W.N., Jr.

Lee, James E.
Durham, NC
Psychiatry

Limberakis, Ant.
Philadelphia, PA
Radiology

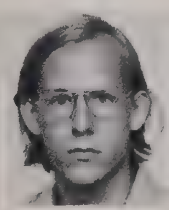
Lipton, H.A.


Lister, Philip
New York, NY
Psychiatry

Long, Karen L.
Chicago, IL
Pediatrics

Markert, Louise
Durham, NC

Marrow, Henry G.
Durham, NC
Pathology


Martell, Jon V.
Dallas, TX
Internal Medicine

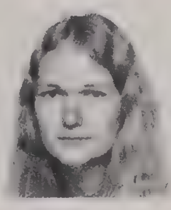
McAlister, David
Dallas, TX
Internal Medicine

McCachren, Samuel
Durham, NC
Internal Medicine

McCoy, Stephen
Durham, NC
Surgery

Meyers, Molly
Seattle, WA
Psychiatry

Mold, David
Durham, NC
Biochemistry


Moll, Maria E.
Salt Lake City, UT
Internal Medicine

Nordstrom, James
Durham, NC
Internal Medicine

Novick, Thomas L.
Durham, NC
Surgery

Orland, Richard A.
Nashville, TN
Internal Medicine

Paterson, Robert
Durham, NC
Internal Medicine

Peterson, C.L.

Phillips, G., Jr.
Birmingham, AL
Internal Medicine

Post, Nancy
Hartford, CT
Internal Medicine

Prince, Marilynn
New York, NY
Internal Medicine

Puleo, Joel G.
Durham, NC
Ob.-Gyn.

Raine, Wilfred L.
New Haven, CT
Pediatrics

Ramey, Thomas L.
Richmond, VA
Internal Medicine

Reintgen, Douglas
Durham, NC
Surgery

Rivers, Reuben
Birmingham, AL
Internal Medicine

Ross, J.W.

Ross-Duggan, John

Ruck, David
San Francisco, CA
Psychiatry

Ruth, Wayne
Durham, NC
Internal Medicine

Rutherford, G.W.

Schirmer, Bruce
Durham, NC
Surgery

Sealy, David P.
Charleston, SC
Family Practice

Shivers, Jeffrey
Vermont
Pathology

Silimperi, Diana

Slate, R. Ken
San Francisco, CA
Surgery

Smith, Eric P.
Pediatrics

Spivey, Beverly
Birmingham, AL
Family Practice

Stahl, Chris E.
Chicago, IL
Pediatrics

Stanton, Edward
Philiadelphia, PA
Surgery

Stockton, Anne
New York, NY
Psychiatry

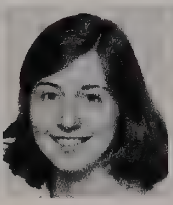
Tatum, Robert K.
Harrington, Pk., NJ
Ob.-Gyn.

Teasley, David G.
St. Louis Pk, MN
Surgery

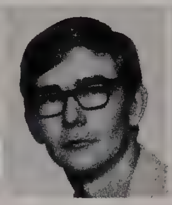
Thalmann, Ellen
Durham, NC
Ob.-Gyn.

Varney, Robert R.
Public Health, CA
Internal Medicine

Vereen, Robert L.



Walsh, Maggie
Boston, MA
Pediatrics



Ward, Brad
St. Louis, MO
Family Medicine

Ward, William G.
Lincolnton, NC
General Surgery

Wessels, Michael
Boston, MA
Internal Medicine

Weyrauch, Terri
Columbia, MO
Internal Medicine

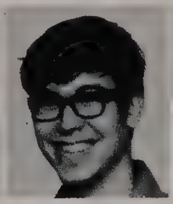
Wheeler, David M.

Wilhelmsen, B.D.
Charlottesv'le, VA
Surgery

Wissow, Larry
Harvey Cdrs, NJ
Pediatrics

Worsley, Stephen
Nashville, TN
Pediatrics

Wright, Anne
Durham, NC
Family Practice



York, Mike
Bethesda, MD
Family Practice

Young, D. Chris
Charlot'vle, VA
Surgery

Zern, Ruthann T.
Durham, NC
Ob.-Gyn.

ALSO GRADUATING
WITH THIS CLASS

Spanarkel, Maryb.
Philadelphia, PA
Internal Medicine

Joanne Piscitelli ('81) in the Mudd Library reading room, 1979

When I first visited Duke the June before I enrolled, Dr. Syd Osterhout urged me not to talk with the first-year students. They were too exhausted by the truly incredible amount of basic science which was presented in nine months of the "core curriculum" to appreciate the experience or its applicability to caring for sick people. As I toiled over biochemistry notes and gross anatomy diagnoses, worried through grueling exam schedules, and observed the psychological drain on myself and on my classmates, I had little use for the "core curriculum" either. A sense of shared insanity seems to knit first-year classes together, and the therapeutic diversions amazed me. I recall the Halloween Dance — **Come As Your Favorite Disease,** the nearly disastrous kidnap attempt by a band of farcical Cuban guerillas behind a dumpster at Eckerd's Drug Store, and the buff-only pond in Hope Valley. I remember the talents of Duke med students most vividly expressed in the annual med school show. Even the titles of these extravaganzas — **Zen and All the Beer You Can Drink, What We Hold Most $acred,** and **Circus Rhythms** — were irreverent, clever, and politically potent.

In retrospect, the second year at Duke, the clinical clerkships, was the most valuable and unique. It's a real sacrifice for an intern to allow a med student the first history and physical of a new patient, the first attempt at a procedure, and the first review of the literature and questioning of the senior staff. Yet Duke students are consistently given such privilege and responsibility. Dr. Eugene Stead emphasized that the students' major goals are to care for patients, to find and assimilate "the data", and to enjoy the practice of medicine. Occasional callous residents and attendings obstructed the students' clinical and emotional maturation. Fortunately, there were enough compassionate physicians and students to provide models and support for our pursuit of a caring attitude, of the facts, and of fun during the second year.

The breadth of opportunities in the wholly elective third and fourth years defies easy description. I was fascinated by and felt deficient in so many areas that I took many classes and reading electives, and divided my clinical work between medicine and pediatric subspecialties. Many of my comrades did bench work and studied at other institutions. With a dozen classmates, I trained in a DUPAC (Duke University Preventive Approach to Cardiology) program and became one of the many joggers on campus. I was saddened by the folding of the Edgemont Clinic, a service to the East Durham community and a rewarding practical education for students. I hope Edgemont's successor, East End Health Center, recaptures its spirit of commitment. Finally, as a transplanted Yankee tutored by Southern friends, I also came to know and love barbeque, bluegrass, the Blue Devils, the Smokies, the Outer Banks, and Durham's long spring.

Maggie Walsh, M.D. '79

The Davison Building in the snow, 1980

MORE CANDIDS

Dean Davison and students, October 1948

Medical School Library, December 1937

10th Anniversary of Duke Medical School, November 1940

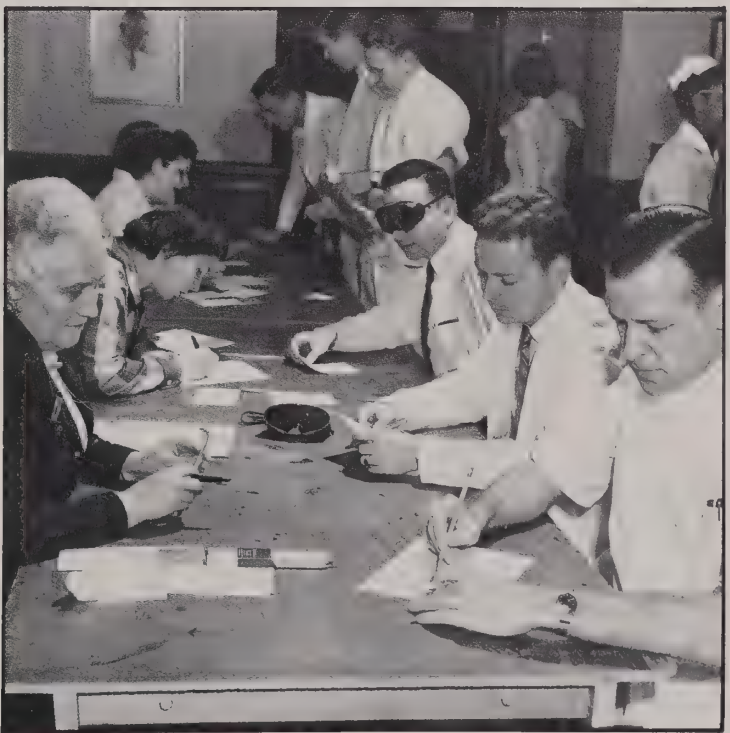
Graduation 1938, **L to R:** Court Berry, Fremont Hall, Charlie Styron, Joe Van Hoy, Jim Currens. **Above:** Weldon Ross. Others are family.

Hospital Recovery Room, 1947

Female students, October 1950

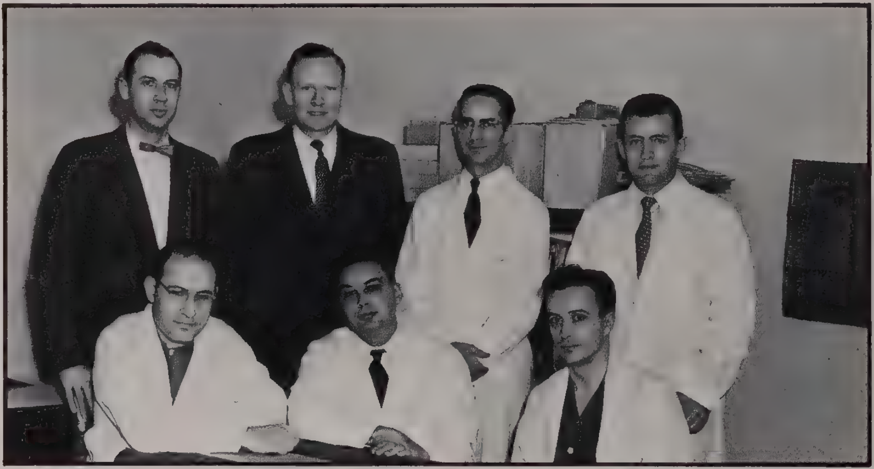
Medical students, 1952

Medical Alumni, April 1950



Doctors registering for the draft, 1951

Medical school registration, October 1953


Markle Scholars, March 1954; **Front:** Geo. Anlyan, Seymour Korkes, Ivan Brown; **Back:** Wayland Hall, Sam Martin, Geo. Schwert, Wm. DeMaria

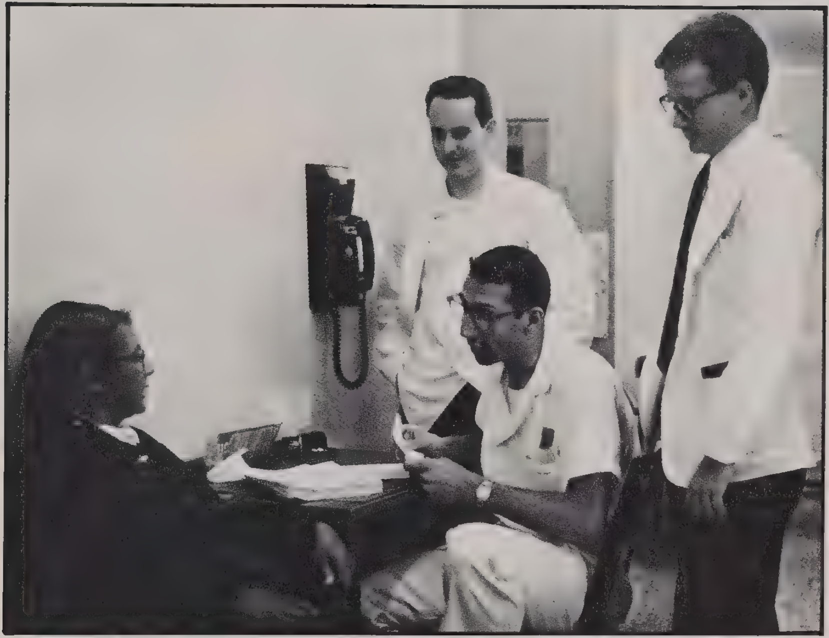
Professor Joe Beard's dog surgery lab, Class of 1953

Medical school registration, October 1953

Medical student registration, October 1954

Aerophysiology lab, November 1958

Medical students, 1961


Medical students at work, 1961

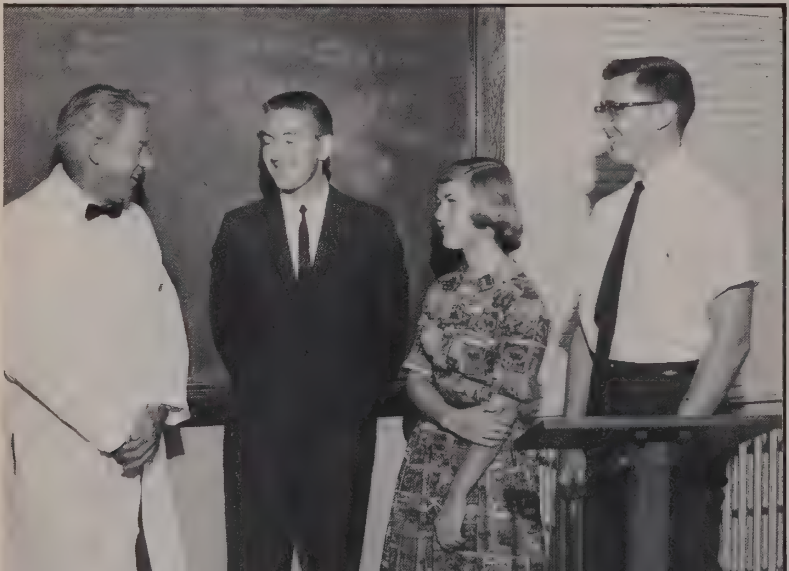
Medical students going to Oxford, England, 1955

Medical student tags, September 1959

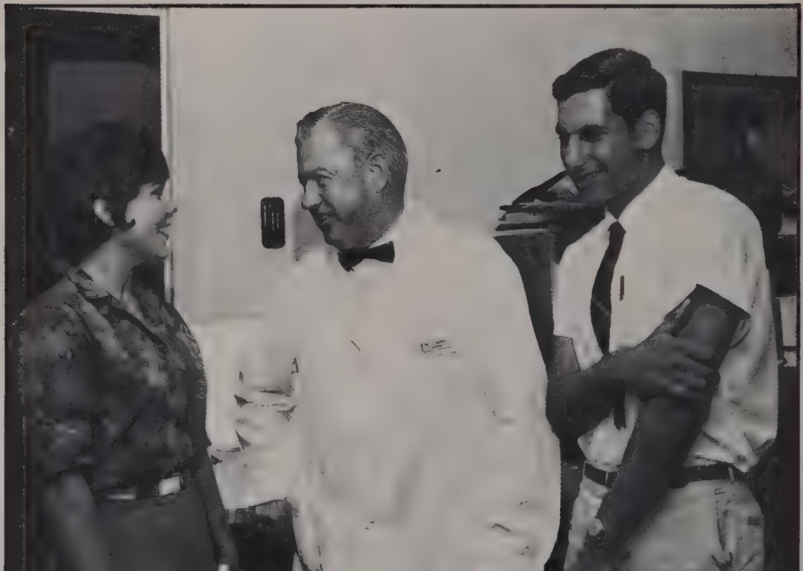
Fallout test on campus, November 1962

Medical students at work, 1961

Dr. Jay Arena, about 1970



New medical students, September 1961

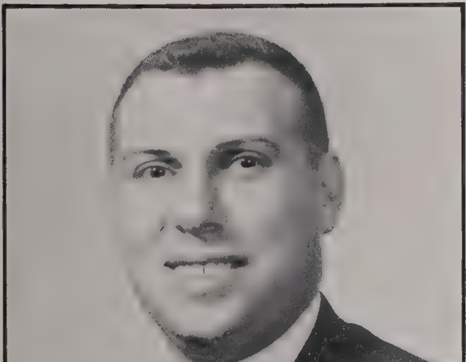


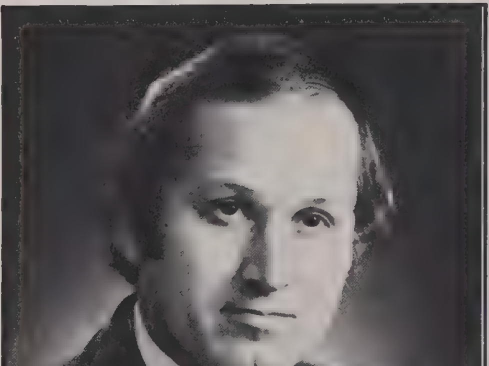
New students, September 1962

Dr. Anlyan and new students, September 1964

Student-Faculty Show at the Stallion Club, 1971

Student-Faculty Show at the Stallion Club, 1971


Robert Francis Corwin, M.D.


Richard A. Mladick, M.D.

Albert Doss, taken in 1971

ADMINISTRATION

The management of a large, internationally respected medical center is an enormous task requiring the coordinated efforts of many Administrators. In compiling this section of the 1980 *Aesculapian,* it became apparent to me that it would be impossible in a volume of this size to feature every person in the Administration. Since this *Aesculapian* is really a compilation of the fifty year history of Duke Medical Center as perceived by its medical students, I have chosen instead to feature those Officers of the Administration who touch the lives of the medical students most directly and whose guidance shapes not only our four years at Duke, but our futures as well. I have attempted to trace briefly the history of each of the Offices — to explore the details of when and why the Offices came to be and how they have changed over the years — and to credit previous Officers and their contributions to the medical center.

I am most grateful to the featured Administrators for their support of this yearbook and for their time and efforts spent to help provide me with the historical and current information which forms the groundwork for this section. I have chosen to acknowledge friends in the Administration who have contributed to our medical student experience in general or to the compilation of this volume in particular. I wish to thank my Editor-in-Chief for his infinite patience, helpful suggestions, and inspiring stamina. And to P.W.S. — thanks for just being there.

J.L.P.

7

ADMINISTRATION

Organizational Charts 243

Anlyan 244

Busse 245

Christakos 246

Thompson 247

Osterhout, S.K. 247

Johnson 248

Osterhout, S. 248

Weinerth 249

Rourk 249

Frothingham 250

Bird 250

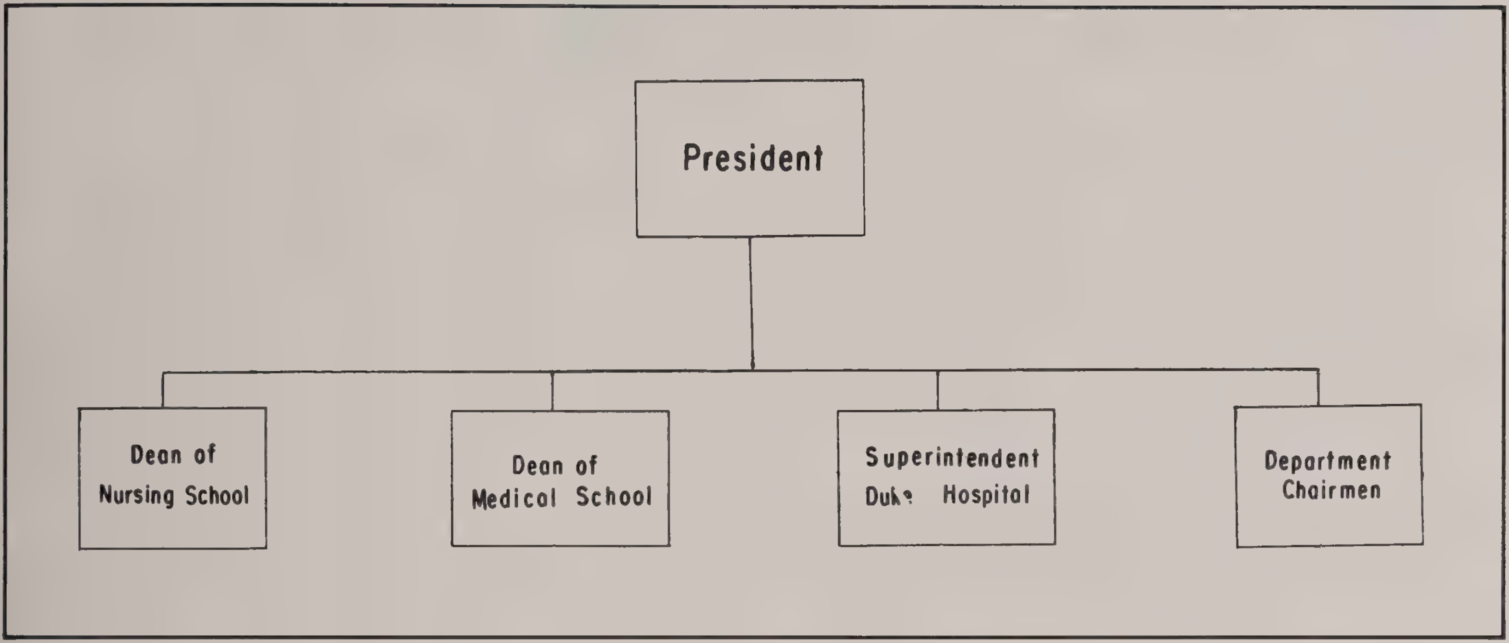
Robinson 251

More Faces in the Administration 251

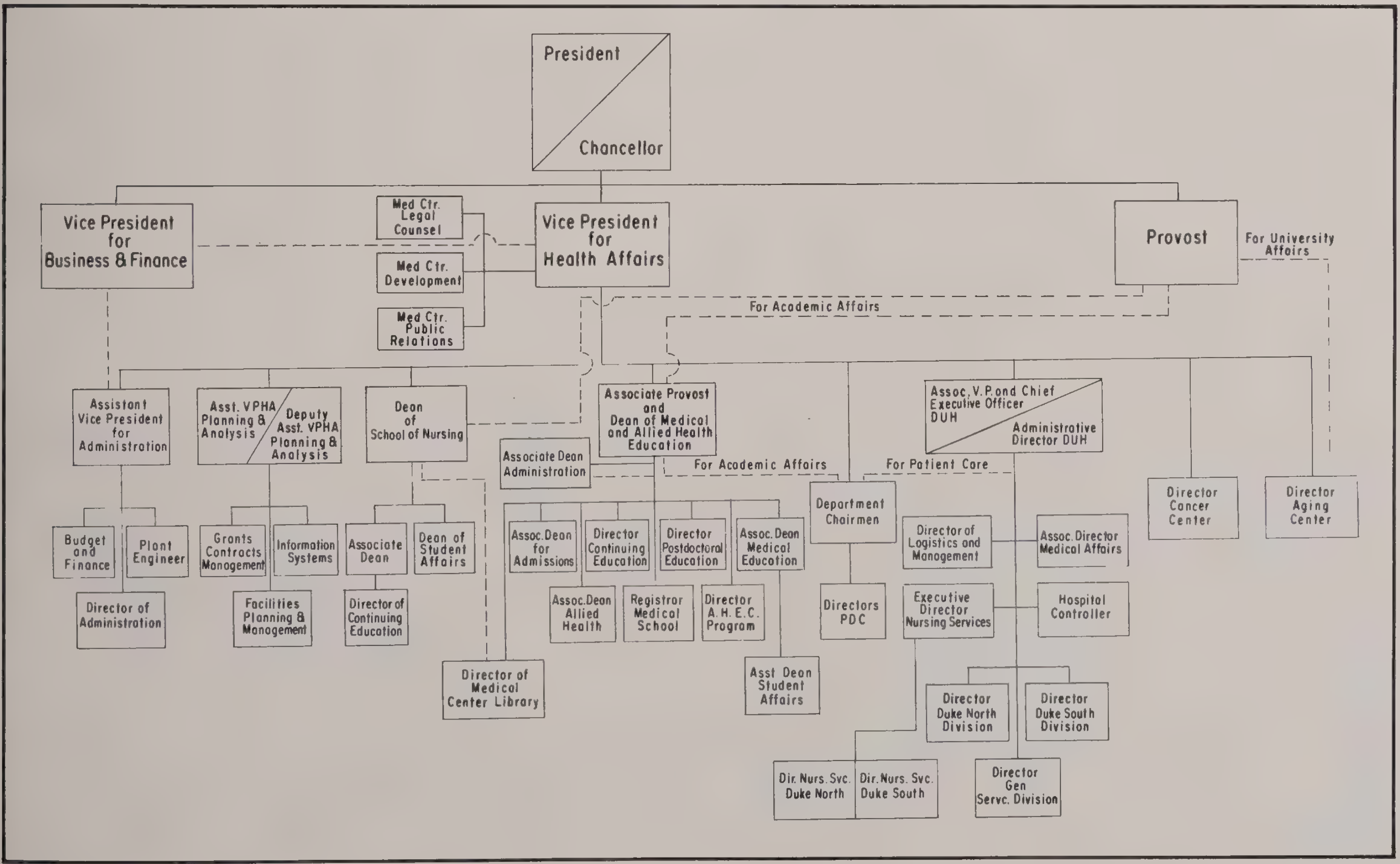
GALENVS

DUKE UNIVERSITY MEDICAL CENTER ADMINISTRATION

1930



1980


President
Chancellor
Vice President for Business & Finance
Med Ctr. Legal Counsel
Med Ctr. Development
Med Ctr. Public Relations
Vice President for Health Affairs
Provost
For University Affairs
For Academic Affairs
Assistant Vice President for Administration
Asst. VPHA Planning & Analysis
Deputy Asst. VPHA Planning & Analysis
Dean of School of Nursing
Associate Provost and Dean of Medical and Allied Health Education
Associate Dean Administration
For Academic Affairs
For Patient Care
Assoc. V. P. and Chief Executive Officer DUH
Administrative Director DUH
Director Cancer Center
Director Aging Center
Budget and Finance
Plant Engineer
Director of Administration
Grants Contracts Management
Information Systems
Facilities Planning & Management
Associate Dean
Dean of Student Affairs
Director of Continuing Education
Director of Medical Center Library
Assoc. Dean for Admissions
Director Continuing Education
Director Postdoctoral Education
Assoc. Dean Medical Education
Assoc. Dean Allied Health
Registrar Medical School
Director A. H. E. C. Program
Asst Dean Student Affairs
Department Chairmen
Directors PDC
Director of Logistics and Management
Assoc. Director Medical Affairs
Executive Director Nursing Services
Hospital Controller
Director Duke North Division
Director Duke South Division
Dir. Nurs. Svc. Duke North
Dir. Nurs. Svc. Duke South
Director Gen Servc. Division

William G. Anlyan, M.D.

VICE PRESIDENT FOR HEALTH AFFAIRS

The chief executive officer of Duke University Medical Center during its first thirty-three years was the Dean of the Medical School, who managed and guided the operation, policy, and growth of the entire medical center. Under Dr. Wilburt C. Davison's leadership from 1927 to 1960, the medical school, nursing school, and hospital were conceived and built. Both Dr. Davison's knack for searching out and appointing young, energetic, and talented physicians and academicians to department chairmanships and the establishment of the PDC as conceived by Dr. Deryl Hart resulted in the rapid evolution of Duke into a world renowned clinical and medical research institution.

When Dr. Barnes Woodhall became Dean in 1960, he had the foresight to realize that the piecemeal expansion of the hospital — the policy of "add a wing" whenever a large enough sum of money was acquired — could not go on unchecked. He, therefore, contracted Booz, Allen, and Hamilton for an internal study of departmental activities and development of the first long range plan for construction of medical center facilities.

When Dr. Woodhall became Vice Provost of the University in 1964 and Dr. William G. Anlyan succeeded him as Dean, they worked closely together to implement the coordinated effort at medical center expansion. During their tenures as Dean in the 1960's came the additions of the Gerontology, Clinical Research I, and Diagnostic and Treatment Buildings (Blue Zone), the Barnes Woodhall Building (Red Zone), and the Nanaline H. Duke Building. From their work together arose the notion to build facilities separate from the hospital, resulting ultimately in the Research Drive basic science complex, the Communications Center and Library, the Searle Center, and Duke North.

By 1969, the enormous complexity of medical care, the ever-increasing number of learners, the rapid growth of physical facilities, the spiraling budget, and the looming presence of government regulations made it clear to Dr. Woodhall, then Chancellor of the University, that the administration of the medical center must be expanded to meet these responsibilities. In that year, he appointed Dr. Anlyan to be the first Vice President for Health Affairs.

Dr. Anlyan came to Duke in 1949 after receiving his M.D. degree from Yale. Following his internship and residency in General and Thoracic Surgery here in 1955, he was appointed to the faculty and has been Professor of Surgery since 1961. His continual demonstration of organizational ability, foresight, amicability, and talents as teacher and researcher soon led to the rapid succession of his administrative appointments: Associate Dean in 1963, Dean in 1964, and finally Vice President for Health Affairs in 1969.

As Vice President for Health Affairs, Dr. Anlyan has endeavored "to orchestrate the complexities of finance, research, education, and patient care." Whereas Dr. Davison operated the medical center on a budget of $100,000, with half the support coming from the University, today Dr. Anlyan is responsible for the medical center's $250 million annual budget. He must see to the support of 1800 learners with a minimum (unchanged since 1930) endowment for the medical school and to the provision of quality patient care for a large number of nonpaying patients. While research pays for itself through grants, the revenue generated by the PDC is the largest single source of income for the medical center, a fact made possible by Duke's status as a "private institution in the private sector." A firm believer in the private sector, Dr. Anlyan is continually campaigning for endowments to support general medical education.

As an educator, Dr. Anlyan is not only active in educational policy and planning for medical and allied health students, house staff, and physicians in continuing education, but also is an advocate for education of the public, especially in preventive medicine.

A member of numerous local, state, and national committees and advisory councils for delivery of health care services, Dr. Anlyan is involved in health care policy decisions throughout the country. Frequently traveling abroad to examine and advise health care systems in other countries, he returns with new ideas to update and improve health care in the U.S.

The myriad details of daily operation and future planning for the medical center are mind boggling, and Dr. Anlyan is quick to credit those people in the Administration to whom he has given responsibility for carrying out such details. Dr. Busse, as Dean of Medical and Allied Health Education, and Dr. Robinson, as Chief Executive Officer of Duke Hospital, work closely with Dr. Anlyan to blend the two major purposes of the medical center — medical education and patient care. Due to rapid advances in medical science and patient care, planning and development of programs and physical facilities can no longer be sufficiently managed by contract with a private company as was done two decades ago, and therefore offices for Planning and Analysis, and Development have been created. With continued governmental intervention into the health care system, the medical center is nearly "paralyzed by legal constraints" so complex that Dr. Anlyan has added a legal counsel to his staff.

In spite of the complexity of it all, Dr. Anlyan is unhesitating in his opinion of how Duke has attained international prominence for excellence in patient care and medical research — "people and programs." Dr. Anlyan is one of those people.

Ewald W. Busse, M.D.

ASSOCIATE PROVOST, DUKE UNIVERSITY DEAN OF MEDICAL AND ALLIED HEALTH EDUCATION

The history of the office of the Dean of the Medical School is in many ways the history of Duke University Medical Center. The accomplishments of the five deans have both influenced and reflected the growth and changes during the medical center's fifty year history.

In 1927, Dr. Wilburt C. Davison, first Dean of the Medical School, was brought from Johns Hopkins University by William P. Few, president of the new Duke University, to develop a medical school, a nursing school, and a hospital, as provided for by James B. Duke upon his death in 1925. President Few had been impressed by Dr. Davison's seemingly boundless talents, enthusiasm, work capacity, and innovativeness, which had brought him, at the age of 35, through a Rhodes scholarship and medical training at Oxford and Johns Hopkins, to his teaching and administrative appointments in the Hopkins Department of Pediatrics, and finally to be assistant to the Dean of the Hopkins Medical School.

After three years of preparation, Duke Hospital opened its doors in 1930, and the first medical and nursing students were admitted. Dean Davison presided over the medical center for the next 30 years and is remembered both for his dedication to his patients during his term as Chairman of the Department of Pediatrics (1927-1954) and for his commitment to all aspects of quality medical education, including undergraduate medical curriculum, graduate training programs, and continuing education.

Following Dean Davison's retirement in 1960, Dr. Barnes Woodhall became Assistant Provost and Dean of the School of Medicine, a position he held for four years until he became Vice Provost of the University. Dr. Woodhall had received his medical training at Johns Hopkins, and after coming to Duke in 1937, served as Chairman of the Division of Neurological Surgery from 1946 to 1960. With his foresight and long range planning capabilities, Dr. Woodhall began to coordinate the rapid expansion of the medical center. Dr. Woodhall's successor, Dr. William G. Anlyan, served as Dean from 1964 until 1969 and continued the trends begun by Dr. Woodhall. Medical education underwent considerable revision during the 1960's with Dr. Woodhall and Dr. Anlyan overseeing the planning of and transition to the new medical school curriculum in 1966.

By 1969, it became clear that the administration must be expanded to manage the added responsibilities of the rapidly growing medical center and to allow the Dean to devote full time to educational policy for the ever-increasing number of trainees at the medical center. In that year, Dr. Anlyan was appointed Vice President for Health Affairs, and the late Dr. Thomas P. Kinney became the fourth Dean of the Medical School. Dr. Kinney had come to Duke in 1960 from Case Western Reserve to become Chairman of the Pathology Department. As one of the key designers of the new medical school curriculum and a dedicated instructor, he was ideally suited to be the chief planner and policymaker for medical education at Duke.

The following year, the medical school was consolidated with the allied health programs under Dr. Kinney, who became Dean of Medical and Allied Health Education. In this way, all educational programs at Duke, with the exception of the Nursing School, would ultimately be responsible to the Dean.

Upon Dr. Kinney's retirement in 1974, Dr. Ewald W. Busse was appointed Associate Provost and Dean of Medical and Allied Health Education. Dr. Busse, who received his M.D. degree at Washington University in St. Louis and his psychiatric training at the University of Colorado Medical Center, came to Duke in 1953 as Chairman of the Department of Psychiatry, a position he held until his appointment as Dean. He was founding Director from 1957 to 1970 of the Duke University Center for the Study of Aging and Human Development, and in 1965 he was named J.P. Gibbons Professor of Psychiatry.

Dr. Busse describes the dual aspects of his office:

> The Dean is responsible for surveillance and approval of all appointments and promotions to the faculty, for student admission policies and procedures, for curriculum content of the Medical School and for the teaching facilities necessary to conduct the teaching activities of the Medical Center. Offices reporting directly to the Dean of Medical and Allied Health Education are those of Associate Dean of Medical Education, Associate Dean of Allied Health Education and Administration, Associate Dean of Medical School Admissions, the Director of Graduate Education, the Director of Continuing Education, the Director of Area Health Education, the Chairman of the Department of Physical Therapy, and the Director of the Communications Center and Library.
>
> The Dean is also designated Associate Provost and, in this capacity, is concerned with maintaining consistency between the University and Medical School policy and administration. Over these fifty years, the responsibility and activities of the Dean's Office have of necessity responded to numerous factors including the socioeconomic development of Durham and North Carolina, the impact of wars and political changes, the explosion of biomedical knowledge and changes in medical practice, the alteration of curriculum content and educational techniques, and the ever-increasing interjection of government regulations into medical education, research, and the practice of medicine.

Arthur C. Christakos, M.D.

ASSOCIATE DEAN OF MEDICAL EDUCATION

In the early years of Duke Medical School all medical student academic affairs were managed directly and single-handedly by Dr. W.C. Davison, Dean of the Medical School. Alumni of those early years recall that Dean Davison knew every student by name. By 1954, however, the medical student body had grown to nearly 300 students, and the administrative duties of the office of the Dean had grown to the point that Dr. Davison appointed an administrative Assistant to the Dean, Kenneth E. Penrod, Ph.D. Shortly thereafter, in 1956, William P.J. Peete, M.D., presently Professor of Surgery here at Duke, was appointed Assistant to the Dean and dealt more directly with academic affairs. Dr. Peete continued to serve under Dean Barnes Woodhall until 1963.

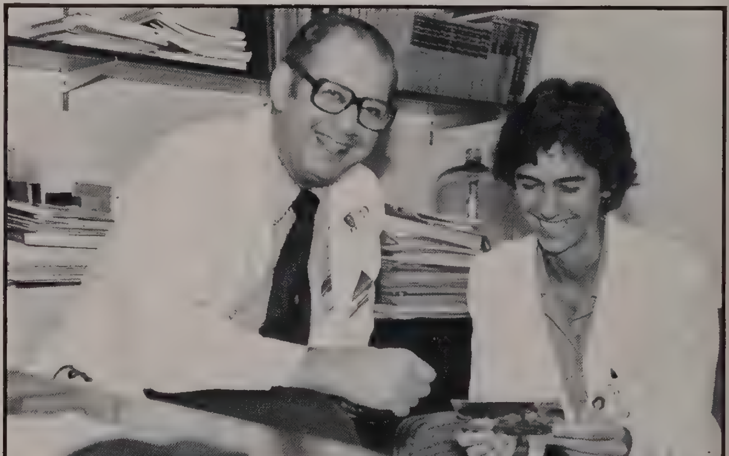
By 1965, the continued growth of the medical student body and the pending conversion to the new curriculum necessitated the creation of the first distinct office to handle medical student academic affairs as we know it today. In that year, Dr. Anlyan, then Dean of the Medical School, appointed E. Croft "Johnny" Long, Ph.D. in Physiology, to be his Assistant Dean of Medical Student Affairs — the title being changed to Associate Dean of Undergraduate Medical Education in 1968. Dr. Long, remembered for his colorful scarves trailing behind as he drove his subcompact sports car, served in that capacity until 1970. Dr. William D. Bradford then served as acting Associate Dean until Dr. Johnnie L. Gallemore was appointed to the post in 1971. Dr. Gallemore, a psychiatrist, earned his J.D. degree during his tenure and left Duke to assume the Chairmanship of the Department of Psychiatry at East Tennessee School of Medicine.

In 1974 Dr. Bradford resumed the Office of Associate Dean of Medical Education and brought with him his infectious enthusiasm for athletics and physical fitness. He originated the style of the "official Dean's letter" of recommendation to graduate medical training programs which is still in use today. In 1978, when Dr. Bradford stepped down to resume his work as Associate Professor of Pathology, Dr. Arthur C. Christakos was appointed the new Associate Dean of Medical Education.

"South Carolinian by birth and Greek in origin," Dr. Christakos completed medical school, a rotating internship, a one-year Pathology residency, and a three-year residency in Obstetrics and Gynecology, all at the Medical College of South Carolina. He served two years as a medical officer in the U.S. Navy from 1957 to 1959. Following a fellowship in human cytogenetics at Columbia University under the auspices of the Josiah Macy Foundation, Dr. Christakos joined the Department of Obstetrics and Gynecology at Duke in 1964 where he is now Professor. His special interests include human cytogenetics (especially as it relates to prenatal diagnosis of chromosomal disorders), family planning, "town-gown" relationships (interchange between medical center and community physicians), and moral and ethical issues in Obstetrics and Gynecology.

As Associate Dean of Medical Education, Dr. Christakos says, "The sole purpose of this Office is to serve the academic needs of our students, and if that includes social, moral, and emotional support, then the personnel of the Office make themselves available for these needs." Another responsibility of the Office is that of assuring the public that the physicians produced by the educational process at Duke are indeed "worthy to serve the ill." These ends are accomplished through an "open-door policy for student-office interaction" where confidentiality is the first rule. Wide use of faculty for professional advising, placement of students in excellent graduate training programs through the "Dean's letter," and personal contact with program directors are further functions of the Office.

According to Dr. Christakos, "If this Office can give our students the support they require without forcing itself upon them, and if this Office can honestly take pride in the physicians offered to society by the Duke University School of Medicine, the bulk of its job will have been done."



Thomas T. Thompson, M.D.

ASSOCIATE DEAN OF ALLIED HEALTH ASSOCIATE DEAN OF ADMINISTRATION

As both Associate Dean of Allied Health Education and Associate Dean of Administration, Dr. Thomas T. Thompson demonstrates considerable talent at concurrently holding two separate and distinct administrative offices.

Allied Health Education at Duke has its roots in the 1950's when the "Paramedical Courses" were coordinated by a small committee. By 1969, the number of students and programs had grown, requiring a more central directorship, and Dr. A. Wendell Musser was appointed Director of Allied Health Education Programs. The following year, Allied Health Education was consolidated with the Medical School under Dr. Thomas Kinney, Dean of Medical and Allied Health Education, while Associate Deans were appointed to head the two divisions. The first Associate Dean of Allied Health Education was Roger J. Bulger, M.D., who was succeeded in 1973 by Dale R. Lindsay, M.D. Since 1975, the post has been filled by Dr. Thompson, who notes that "Allied Health Education is a collaborative effort between the Veterans Administration and the Medical Center." In 1971, the Veterans Administration constructed and equipped the facility located behind the V.A. Hospital to be used for allied health education. Currently, there are 450 students enrolled in the two master's degree programs, four baccalaureate programs, and 13 certificate programs.

Dr. Thompson's position as Associate Dean for Administration was created in 1978 by Dr. Busse, Dean of Medical and Allied Health Education. Previous deans had had administrative assistants, "but," says Dr. Thompson, "there were limitations as to the amount of responsibility and authority which could be delegated to an administrative assistant. With an Associate Dean, not only could responsibility for certain aspects of the operation of the medical school be delegated, but the authority for action as well." Current responsibilities of Dr. Thompson include personnel, budgets, day to day operations, and long range space planning for all of the administrative and academic divisions of the School of Medicine. In addition, the Financial Aid Office, Central Teaching Laboratory, Audiovisual Education, and Paths for Employee Progress report directly to Dr. Thompson.

Dr. Thompson is a graduate of the Medical College of Virginia. Following a rotating internship, he was in the general practice of medicine before taking a residency in Radiology at Duke. He was Chief of Radiology at the V.A. Hospital prior to his administrative appointments.

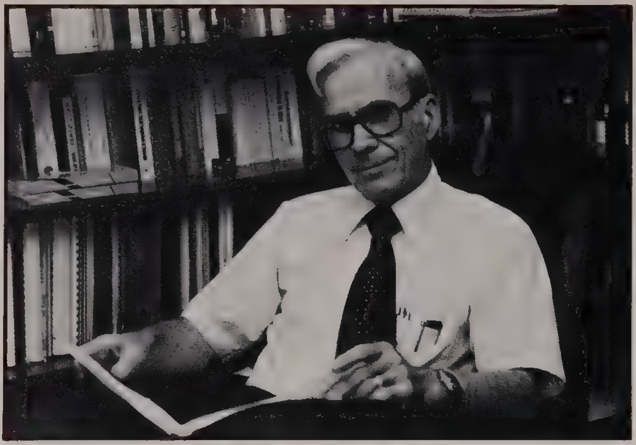
Shirley K. Osterhout, M.D.

ASSISTANT DEAN OF STUDENT AFFAIRS

In 1971 Dr. Shirley K. Osterhout was appointed Assistant Director of Undergraduate Medical Education, a position newly created by Dr. Thomas Kinney, then Dean of the Medical School, and Dr. Johnnie Gallemore, then Associate Dean of Medical Education. At that time, says Dr. Osterhout, "I envisioned my job as only a small one and entirely related to the needs of the increasing number of women that were entering medical school." She still recalls the first two problems Dr. Gallemore asked her to handle — one medical student who had failed Surgery and another who had become involved in some vandalism at Central Campus Apartments.

It soon became clear, however, that men medical students were seeking her counseling as frequently as women on many issues involving their personal, emotional, social, and academic lives. As the office of the Associate Dean of Medical Education grew to appreciate and respond to the total needs of the students, and not just their academic needs, Dr. Osterhout was provided with office space, increased responsibilities, and her title was changed to Assistant Dean of Student Affairs. In that capacity, she has worked closely since 1974 with the Associate Dean of Medical Education as a student advisor and has such additional varied tasks as: planning the graduation and Hippocratic Oath ceremonies; sponsoring the junior AMWA; managing numerous awards, scholarships, grants, fellowships, and contests involving essays or research papers; working with students planning to do study away from Duke; and guiding the internship application program.

Dr. Osterhout has firsthand knowledge of the changing attitudes and needs of medical students at Duke, having been here since her undergraduate years. Following graduation from Duke Medical School in 1957, she completed her residency in Pediatrics and a fellowship in Pediatric Endocrinology, both at Duke. In 1961 she joined the faculty and is now Assistant Professor of Pediatrics. She maintains her clinical and teaching responsibilities and is well known as Clinical Director of the Duke Poison Central Center.



Charles B. Johnson, Ed.D.

REGISTRAR OF THE MEDICAL CENTER

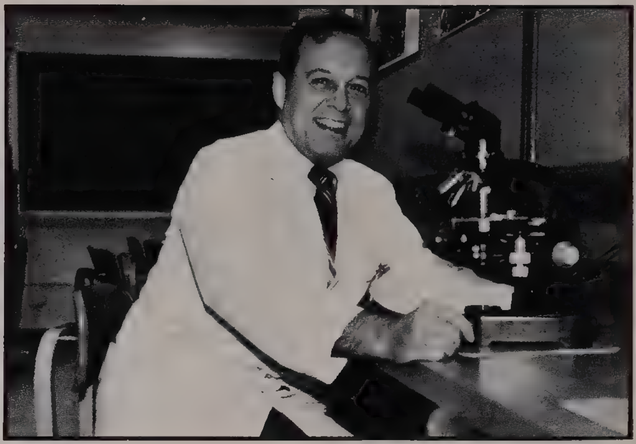
Prior to the appointment of Dr. Charles B. Johnson as the first Registrar of the Medical Center in 1973, educational records for the medical school were handled by the Medical School Recorder who worked through the Office of the University Registrar, while educational records for the allied health programs were handled by each individual program. The advent of the new medical school curriculum in 1966 with its enormous number and wide range of elective courses and programs, the addition of more allied health certificate and degree programs, and the rapid growth of the medical and allied health student populations all resulted in a considerable increase in the complexity of student records. A separate registrar's office, responsible directly to the Dean of Medical and Allied Health Education, was thus created to provide a centralized education information system.

The Registrar's Office provides services for: 1) students in the School of Medicine, 2) students in degree and certificate programs within the Division of Allied Health, 3) physicians and other health professionals taking continuing education courses conducted by faculty members of the Duke School of Medicine, and 4) members of the House Staff.

The extensive services provided for the School of Medicine and the Division of Allied Health include: standardized records preparation and maintenance, transcript production and control, certification of graduation, grade reports, grade analyses, enrollment statistics, cumulative records, honors and class data, records analysis and verification, special statistical studies, and continuing refinement of registration procedures. The Office processes all applications for degree and certificate programs in the Division of Allied Health.

Permanent records (individual and course) are maintained for all continuing education courses registered with the Office, which processes certificates and transcripts and generates annual statistics. The limited services for the House Staff consist primarily of providing rosters and statistics based on information computerized by the Office.

Dr. Johnson, a longtime member of the Duke community, received his B.A., M.A., and Ed.D. degrees here and is now Associate Professor of Education. He has previously served in the Department of Education as Director of Undergraduate Studies and Director of Graduate Studies and has also served as Assistant Dean and Associate Dean of Trinity College.



Suydam Osterhout, M.D., Ph.D.

ASSOCIATE DEAN OF MEDICAL SCHOOL ADMISSIONS

The admission of the first students to Duke Medical School in 1930 — 18 in the class of 1932 and 34 in the class of 1934 — was decided by a committee of three faculty members: Dr. Francis H. Swett, Dr. Harold L. Amoss, and Dr. Wiley D. Forbus. In the following years the committee, chaired by Dr. Swett until his death in 1943, grew to six members, while the class size grew steadily to 75 students. Following a two year chairmanship by Dr. E.E. Menefee, Jr., Dr. Joseph E. Markee was appointed chairman of the admissions committee in 1946, and in 1960 he became the first Assistant Dean of Admissions. Upon Dr. Markee's retirement in 1966, Dr. Suydam Osterhout was appointed to the post and began the tasks of organizing statistical records and formalizing the admissions process.

The 1960's brought pressure from the federal government to increase the number of physicians trained, either by building new medical schools or by increasing the size of existing schools. Duke complied by expanding the size of its entering medical classes from 81 to 86 in 1967, to 104 in 1970, and to the present size of 114 in 1972. Moreover, efforts to increase the percentage of minority students, women, and North Carolinians, as well as the institution of the new curriculum and the M.D.-Ph.D., M.D.-J.D., and M.D.-M.P.H. combined degree programs, necessitated additional, more complex criteria for admission.

The admissions procedure that Dr. Osterhout has devised to incorporate so many variables consists of a series of screens. The initial screen by Dr. Osterhout and a second faculty member determines those applicants (about 42%) granted an interview, which is conducted at Duke or by regional representatives. The applicant's file is then examined by a *troika* made up of a basic science and a clinical faculty member, taken in rotation from the full committee, and Dr. Osterhout. The *troika* members vote independently to rank the applicant on specific criteria. The scores are tallied, and the highest ranking students are presented to the full committee, ideally composed of a representative from each department in the medical center. Dr. Osterhout's final task is to insure diversity among the accepted applicants.

Himself an alumnus of Duke Medical School, Class of 1949, Dr. Osterhout completed his residency in Internal Medicine here in 1956. After receiving his Ph.D. in Virology at the Rockefeller Institute in 1959, Dr. Osterhout returned to Duke, where he now holds joint appointments as Professor of Microbiology and Professor of Medicine.

John L. Weinerth, M.D.

DIRECTOR OF GRADUATE MEDICAL EDUCATION
ASSOCIATE DIRECTOR OF GRADUATE MEDICAL TRAINING

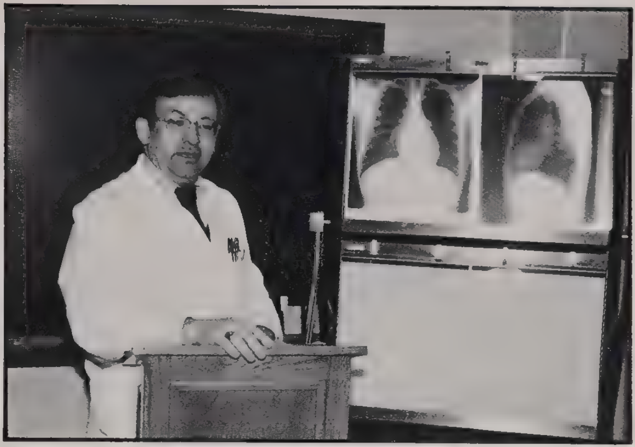
In 1931, the House Staff at Duke Hospital numbered 15 and had increased seven-fold by 1941. During World War II, the size of the House Staff dwindled as many of the young doctors were stationed overseas, but since that time, the House Staff has grown steadily to its present size of 650.

In the early years, selection of House Staff and planning of their training programs were carried out primarily by a small faculty committee and by the departments in which the applicant sought training. Appointments were made by agreement with hospital administration on salaries and how to best staff the various services.

In 1968, Dr. Morton D. Bogdonoff was appointed Assistant Dean of Graduate Medical Education and was succeeded by Dr. Andrew G. Wallace in 1970 and by Dr. Stephen Mahaley in 1972. Dr. John L. Weinerth was named Director of Graduate Medical Education in 1974 and, like his predecessors, oversaw the difficult task of managing both the educational aspects of the House Staff program and the often dichotomous hospital personnel aspects. Following a one-year interim during which Dr. Delford Stickel served as Director, Dr. Weinerth was reappointed in May 1979 with new flexibility and expanded coordinative powers provided by simultaneously holding two positions: 1) Director, Graduate Medical Education, Medical and Allied Health Education, DUMC, and 2) Associate Director, Graduate Medical Training, DUH.

In the first capacity, Dr. Weinerth reports to the Dean of Medical and Allied Health Education and deals with the educational, legal, and technical interests of the House Staff, including checking medical liscensures, providing verification of training letters, and answering to government agencies and to hospital and medical associations concerned with quality of training programs. In the second capacity, Dr. Weinerth reports to the Chief Executive Officer, Duke Hospital, and is responsible for the financial and personnel status of the House Staff, including managing budget, payroll, uniforms, insurance, parking lots, fringe benefits, and call rooms.

Dr. Weinerth is well aware of the needs and interests of the Duke House Staff, having done his own residency in Urologic Surgery here from 1967 to 1973, after receiving his M.D. from Harvard. Following a transplantation fellowship in 1974, he joined the Duke faculty and is now Associate Professor of both Urology and Surgery.



M. Henderson Rourk, M.D.

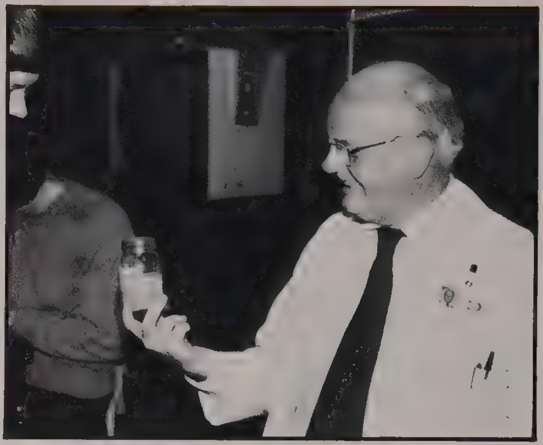
DIRECTOR OF CONTINUING MEDICAL EDUCATION

Dr. W.C. Davison's philosophy that postgraduate medical education is as important as undergraduate medical education provided the groundwork for continuing medical education, which began at DUMC with the founding of the medical school and hospital fifty years ago. In December 1931, Dean Davison himself organized the first two-day course for practicing physicians, which consisted of lectures, a case presentation, and question and answer sessions given by the medical faculty. An annual Duke symposium with visiting lecturers on medical specialty topics had evolved by 1934, but as interest in such a meeting dwindled in the late 1940's, Dr. Davison saw the need to provide a more organized and comprehensive effort directed toward continuing medical education. He therefore appointed William M. Nicholson, M.D., to be Director of Postgraduate Medical Education, a post he held for twenty years. Dr. Nicholson began by renewing invitations to practicing physicians to come to Duke to attend grand rounds, CPC's, specialty refresher courses, and in-hospital tutorials under faculty members up to two weeks in length. Dr. Nicholson is best remembered for his origination of the Morehead Symposium, held annually on the North Carolina coast.

In 1968, William J.A. DeMaria, M.D., was appointed Assistant Dean for Continuing Education and continued in the manner of Dr. Nicholson. During the 1960's, however, the nationwide trend toward requiring continuing education for membership in professional societies, or even for reliscensure to practice, demanded more uniform and stringent courses.

M. Henderson Rourk, M.D., became the Director of Continuing Medical Education in 1977 and sees his role as that of a promoter of CME among physicians, an implementer to disseminate new medical knowledge to Duke alumni in the community, and an overseer of accreditation and records of CME courses. Dr. Rourk views CME as the means by which the physician maintains and updates his education and skills. The lecture and the one-on-one preceptorship have been the most valuable teaching methods in the past and will be continued.

A graduate of the University of Pennsylvania School of Medicine, Dr. Rourk came in 1963 to Duke, where he completed his internship and residency in Pediatrics in 1966. After his fellowship in Pediatric Allergy, Clinical Immunology, and Pulmonary Disease at Duke, he joined the faculty and is now Assistant Professor of both Pediatrics and Community and Family Medicine.



Thomas E. Frothingham, M.D.

DIRECTOR OF AREA HEALTH EDUCATION

Area Health Education Center activities at Duke began in 1974 when Duke joined UNC and Bowman Gray Medical Schools in this statewide program originated a few years earlier by UNC in response to a Carnegie Commission Report on medical education. The theme was decentralization of medical education away from university medical complexes into community medical centers with two perceived advantages: 1) improved quality of community medical practice, since the rigorous scrutiny and challenge of academic medical practice resulting from placement of medical student, resident, and faculty educational activities in the communities would hopefully improve and update patient services, and 2) better distribution of medical manpower, since data indicate that physicians are likely to locate where they train.

North Carolina is divided into nine AHEC areas, each centered around a campus in close association with a large community hospital. Duke is university partner to the Fayetteville AHEC whose campus consists of Cape Fear Valley Hospital and three neighboring buildings — administration, specialty clinics, and the family practice center housing the Duke-FAHEC Family Practice Residency Program. Extensive inservice and technical assistance programs in nursing and allied health, as well as a physicial continuing education program, are organized for the eleven surrounding FAHEC counties.

Dr. Thomas E. Frothingham, founding director of the Duke AHEC, has seen his role primarily as official communicator between DUMC departments and the community facilities with which they are affiliated through AHEC. He notes that the relationship between medical center and community institution has at times been strained, but the five-year collaboration has held together, and the program will continue along present lines with emphasis on strengthening quality of existing activities to improve elective opportunities for students and residents.

Trained in Pediatric Infectious Disease at Harvard, Dr. Frothingham has been at Duke since 1973 as Professor of Pediatrics and Professor of Community and Family Medicine. As of January of this year, he has returned full time to his duties as Director of the Pediatric Outpatient Clinic, and Dr. Frank Lecocq, Associate Professor of Medicine, will be assuming the responsibilities of AHEC director. Dr. Lecocq will encourage Duke's continued contribution to community-based medical education through AHEC, in keeping with the ever-increasing emphasis on Primary Care Medicine in the U.S. today.

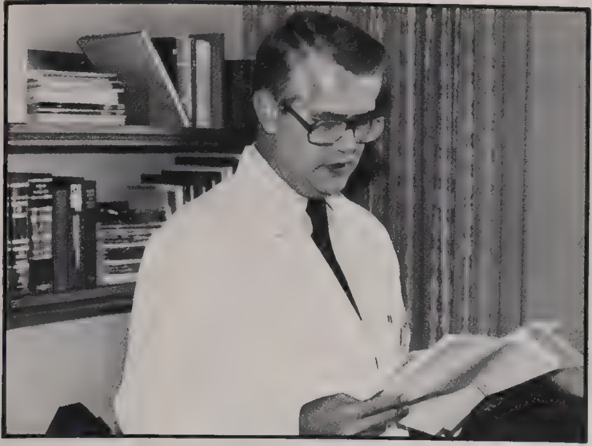
Warren P. Bird, M.S.

DIRECTOR OF THE MEDICAL CENTER LIBRARY

One of the early appointments made by Dean Davison was that of Miss Judith Farrar as Hospital Librarian on September 1, 1929. Assisted only by her mother, Mildred P. Farrar, she began the task of purchasing and cataloging the 20,000 volumes that were ready for use when the Hospital opened in July 1930. For over thirty years Miss Farrar was responsible for providing library services to the students, faculty, and house staff, as well as continuing acquisitions which resulted in a total accumulation of 50,000 volumes during her tenure. In addition, she oversaw both the moving of the Library from a storage room off an East Campus steam tunnel to the basement of the Davison Building and the construction of the reading room in the bottom of the covered-over central air shaft.

Mr. G.S.T. Cavanagh was appointed Director of the newly renamed Medical Center Library in October 1962. Formerly chief librarian at the University of Kansas Medical Center, he began the total reorganization of the Library and its collections and the development of a strong professional staff oriented toward in-depth reference and bibliographic services. It was Mr. Cavanagh's campaign to provide adequate space for the Library that led to planning and construction of the Seeley G. Mudd Building with the Library as its prime tenant. As Professor of Medical Literature and Curator of the Trent Collection in the History of Medicine, a post he continues to hold today, he has been responsible for the development of what is considered the strongest collection of Medical History in the Southeast.

Mr. Warren P. Bird assumed the directorship of the Library in July 1974. As Associate Director, he had worked very closely with Mr. Cavanagh in the planning of the new Library, and his first eighteen months were primarily devoted to the myriad details of the final stages of construction, furnishing, and move-planning for the transition. Since completion of the move in November 1975, Mr. Bird's first priority has been the reorganization of library operations to take advantage of the adequate physical space available for users, staff, and books. Following this, he has been taking steps to increase the utilization of modern technology in the Library. Mr. Bird sees the continued development of a service-oriented staff and the maintenance of the excellence of the Library collections as the keys to providing for the informational needs of the entire Medical Center community.



Roscoe R. Robinson, M.D.

ASSOCIATE VICE PRESIDENT FOR HEALTH AFFAIRS

CHIEF EXECUTIVE OFFICER, DUKE HOSPITAL

When Duke Hospital first opened its doors in 1930, the hospital administrative tasks were managed by the Hospital Superintendent, Marcellus E. Winston. The Hospital Superintendent, along with the Dean of the Medical School, the Dean of the Nursing School, and the Department Chairmen, comprised the Executive Committee which reported directly to the President of the University. Mr. Winston was succeeded in 1933 by F. Vernon Altvater, followed by H.C. Mickey in 1945, F. Ross Porter in 1950, and Charles H. Frenzel in 1959.

By 1968 the clinical services and the educational commitments within Duke Hospital had grown so large and complex that Dr. William Anlyan, then Dean of the School of Medicine, saw the need for a clinician familiar with the interworkings of patient care, medical education, and hospital administration to act as an "arbiter" between these "consumer groups" of Duke Hospital. He therefore appointed Robert E. Whalen, M.D., to the new position of Hospital Director and Assistant Dean for Clinical Services. The following year, Stuart M. Sessoms, M.D., succeeded Dr. Whalen, becoming Associate Dean for Clinical Sciences and Director of Duke Hospital. Richard Peck, M.H.A., was appointed Assistant Director of Duke Hospital.

In 1976 Roscoe R. "Ike" Robinson, M.D., was appointed Associate Vice President for Health Affairs and Chief Executive Officer of Duke Hospital. Mr. Peck, named Administrative Director of Duke Hospital in 1973, has remained in that capacity and works closely with Dr. Robinson who spares no compliments when he notes that Mr. Peck "really runs the hospital on a day to day basis." Since his appointment as chief policymaker for Duke Hospital, Dr. Robinson has acted ably and enthusiastically to blend clinical programs, medical education and research, hospital employee needs, and maintenance of financial integrity of the hospital — all under ever tightening federal control guidelines.

After receiving his M.D. degree from the University of Oklahoma School of Medicine, Dr. Robinson came to Duke in 1954 to begin his internship and residency in Internal Medicine. Following a fellowship year at Columbia-Presbyterian Medical Center in New York, a chief residency year at Duke, and two years as captain and chief of the renal unit at the Wilford Hall USAF Aerospace Medical Center in Texas, Dr. Robinson returned to Duke in 1960. He has been Chief of the Division of Nephrology since 1962 and was named the Florence McAlister Professor of Medicine in 1978.

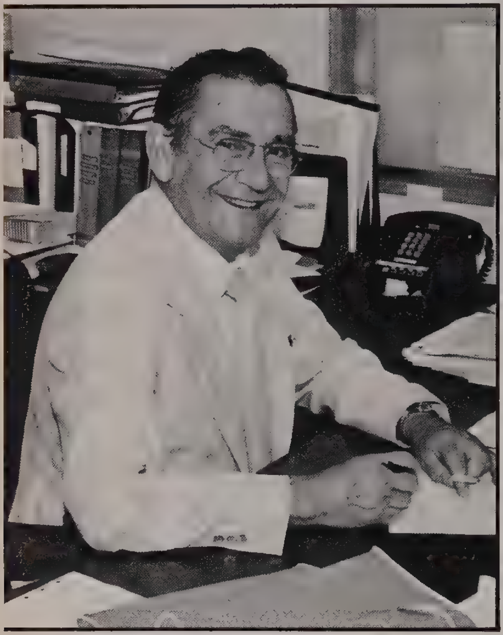
MORE FACES IN THE ADMINISTRATION . . .

Richard H. Peck — Administrative Director of Duke Hospital

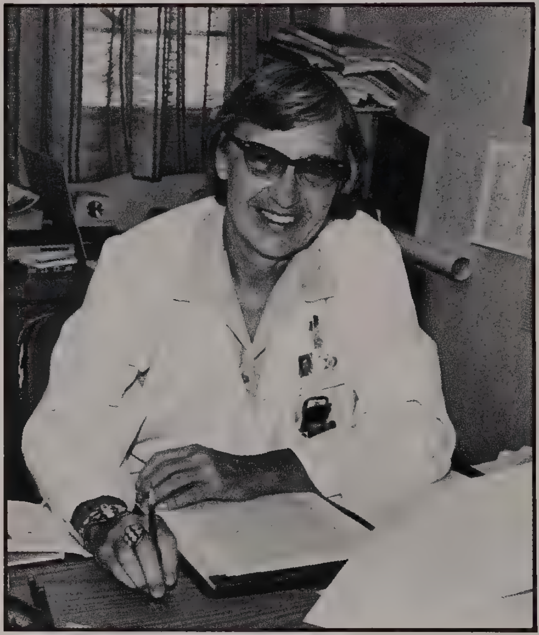
John A. Furlow — Coordinator of Graphic Communications, Duke Hospital North

James F. Gifford, Jr. — Associate Professor of Community and Family Medicine (History of Medicine); Assistant University Archivist for Medical Center Records

. . . IN THE OFFICE OF THE VICE PRESIDENT FOR HEALTH AFFAIRS . . .



John D. Shytle — Assistant Vice President for Health Affairs, Administration



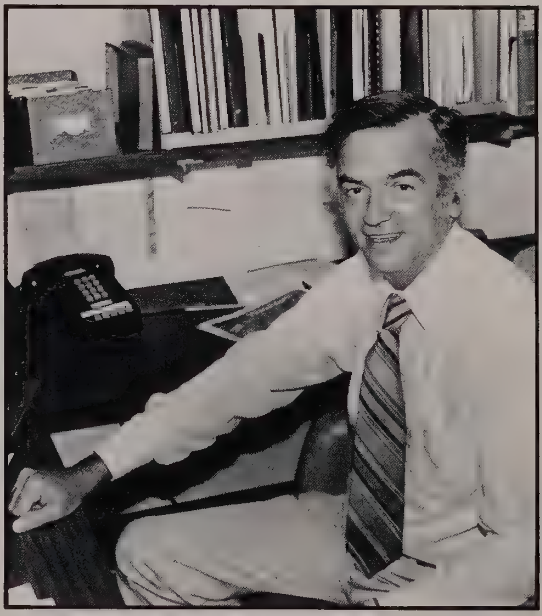
Jane G. Elchlepp — Assistant Vice President for Health Affairs, Planning and Analysis

James L. Bennett, Jr. — Executive Assistant to the Vice President for Health Affairs

R.C. ("Bucky") Waters — Director, Medical Alumni Affairs; Executive Director, Davison Club; Assistant to the Vice President for Health Affairs

Janet Sanfilippo — Director of Medical Center Special Events; Director of the Searle Center; Associate Director of Medical Alumni Affairs

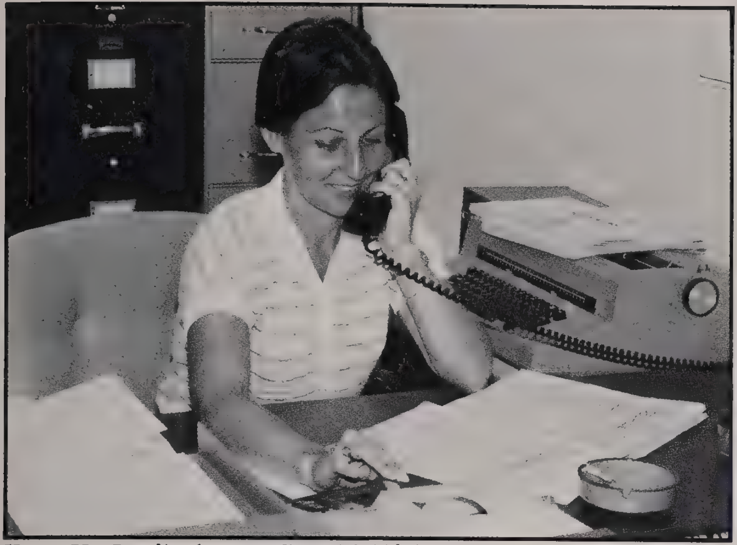
Joyce Umstead — Staff Assistant to the Vice President for Health Affairs



Bernard McGinty — Director of Budget and Finance

Robert G. Winfree — Deputy Assistant Vice President for Health Affairs, Planning and Analysis

IN THE OFFICE OF THE DEAN OF MEDICAL AND ALLIED HEALTH EDUCATION



Karen VanLandingham — Financial Aid Assistant

Nell Andrews — Coordinator of Financial Aid

Kimberly Terrell — Office of Medical Education

May King — Administrative Assistant for Admissions

Jeanne Lee — Office of Medical Education

Ann Rimmer — Administrative Assistant to the Dean of Medical and Allied Health Education

Patricia Cross — Office of Medical and Allied Health Education

THE MEDICAL CENTER

In this section of the fiftieth anniversary *Aesculapian,* I have included all the departments of the School of Medicine, as well as the teaching programs for related health professionals. An essay describing the history of the department, the direction of current growth, and the research objectives, group pictures and candids of the faculty and of the residents or graduate students are included for each of the nine clinical and six basic science departments of the School of Medicine. Similar items are included for the Department of Health Administration, Department of Physical Therapy, the School of Nursing, and the Library/Communications Center. The Allied Health Education Programs are represented by group pictures of the current students.

I would like to thank the many people who helped me with this undertaking — with pictures, information, and moral support. Thanks especially to Grace, Sandra, Betsy, Judy, Cathy, Carolyn, Annie Ruth, and Earl. Thanks to Renata Albrecht who contributed the caricatures of each department. Special thanks to the folks in Dr. Sedwick's and Dr. Laszlo's lab who answered the "yearbook" telephone as it rang constantly for the year I worked on this project.

Last, but not least, thank you to John Lucas, whose energy and perseverance made possible the publication of this yearbook to commemorate the fiftieth anniversary of Duke Medical Center.

PWS

8

THE MEDICAL CENTER

Anatomy 257

Anesthesiology 261

Biochemistry 265

Community and Family Medicine 269

Medicine 273

Microbiology and Immunology 289

Obstetrics and Gynecology 293

Ophthalmology 297

Pathology 301

Pediatrics 305

Pharmacology 309

Physiology 313

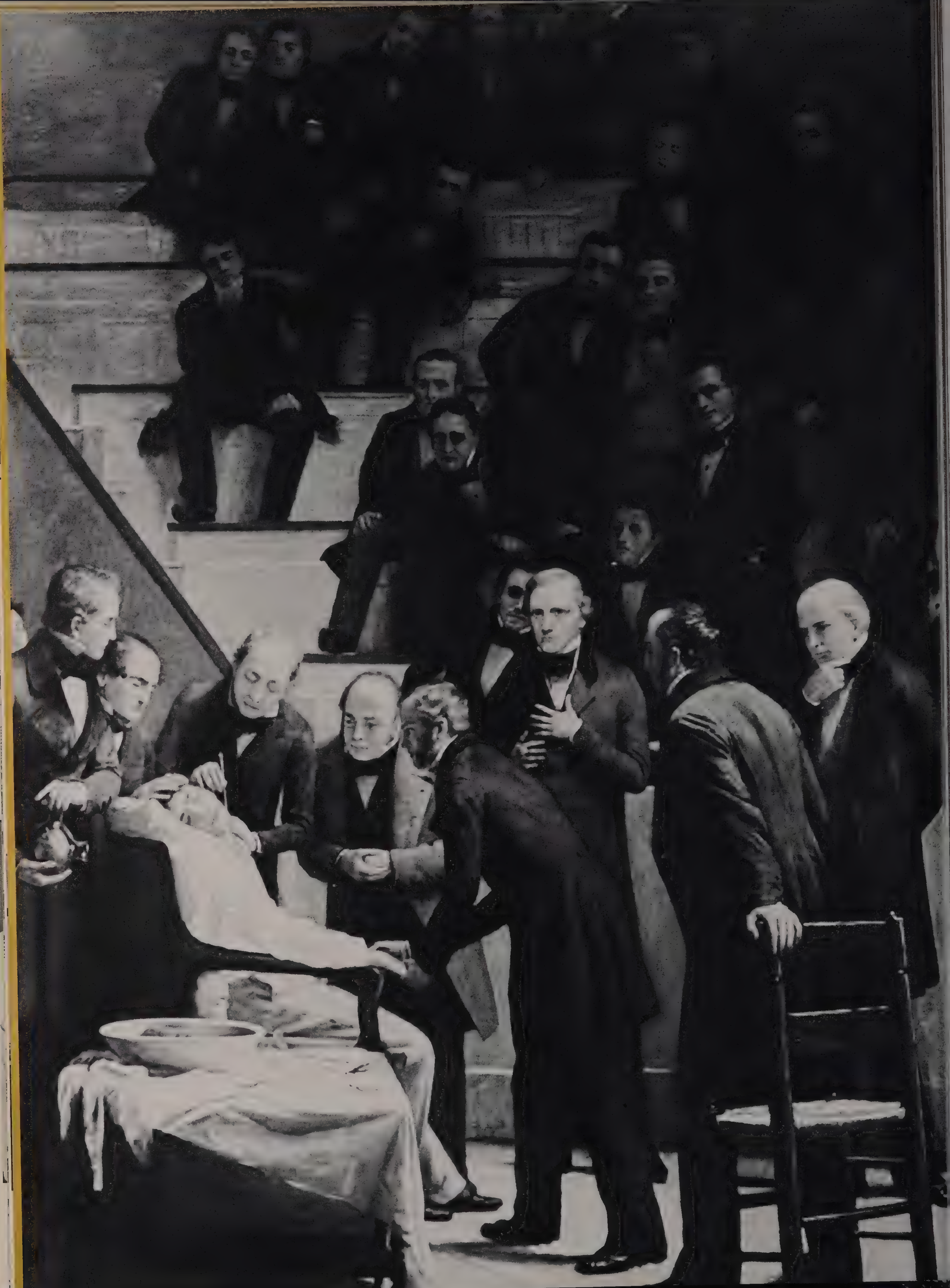
Psychiatry 317

Radiology 321

Surgery 325

Other Departments and Programs 339

Section Editor
Pam Westmoreland Sholar



ANATOMY

J. David Robertson, M.D.
Chairman

The Department of Anatomy was organized in 1930 under the leadership of Dr. Francis Huntington Swett, who headed it until 1943. He was succeeded by Dr. Joseph Markee, who retired in 1966 to be replaced by the present chairman, Dr. J. David Robertson.

Under its first two chairmen, the Department was primarily involved in research in the areas of neuroendocrinology, neuroanatomy, and reproductive biology. Cell biology and physical anthropology also had beginnings in the Department in the early 1960's.

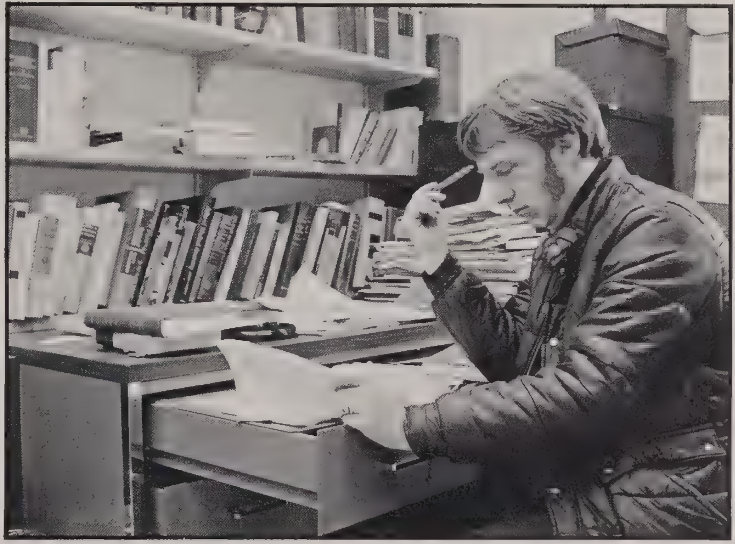
Departmental teaching in the medical curriculum prior to 1966 emphasized classical histology, gross and neuroanatomy, and its graduate program reflected these interests. In 1966, with the new curriculum, a change took place. The drastic reduction in the teaching load allowed the faculty to spend much more of their time in graduate and elective teaching and research. The arrival of a new chairman also resulted in an influx of new junior staff members with new research interests.

The members of the Department share a common intellectual bond: the perception of biological problems in terms of structure in relation to function. The techniques employed often do not differ greatly from those in other departments. But in an operational sense, they differ significantly in emphasizing an approach to a biological problem that first asks the question "what structures are involved?" and then, "how are the component parts inter-related physically and functionally, and how do they evolve and develop?" This common intellectual motif applies equally well to studies of the structure of the most complex living creature down to molecular structure.

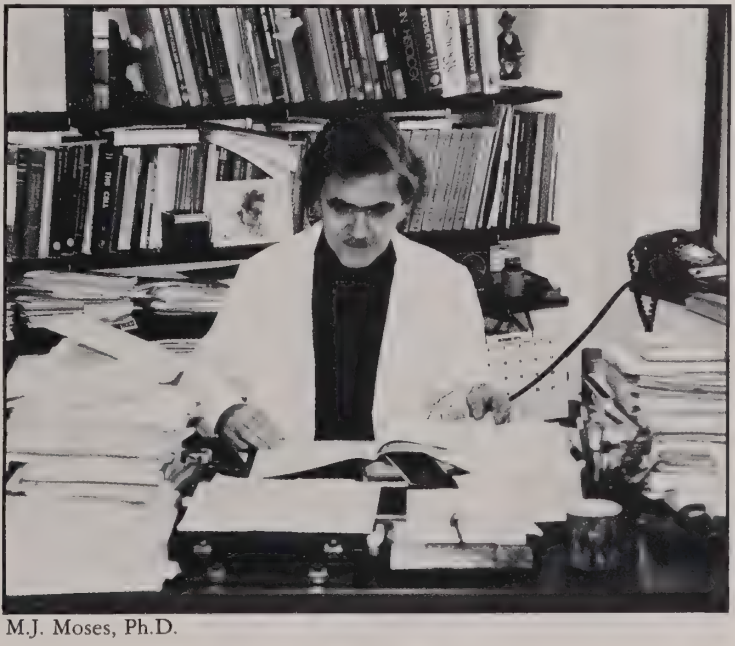
In the Duke University Department of Anatomy, emphasis is placed upon studies of the macroscopic structure and evolution of man and his relatives at one end of the spectrum and at the other, the macromolecular organization of cells and tissues. This is a very large framework within which it is possible to pursue many different kinds of research activity. It is no accident that the senior staff of the Department have backgrounds ranging through medicine, zoology, anthropology, biochemistry, biophysics and physics. Many of the diverse research programs of the Department are interconnected by collaboration of the investigators and their associates, both within and outside of the Department. It should be emphasized that there is much overlap and interplay between the laboratories which do not exist as separate entities, but only as interrelated components of the Department as a whole.

In 1968 a Health Sciences Advancement Award of over 2.5 million dollars was made by the National Institutes of Health to the Duke University Medical Center, mainly for use by the Department of Anatomy and of Microbiology and Immunology over a five year period. In 1973 the Anatomy Department moved into about 22,000 net square feet of laboratory and office space in the new Sands Building. In 1975 an additional 2,000 net square feet became available in the adjacent Jones Building. The overall effect of these developments has been a considerable expansion of the faculty involving several new areas of concentration in anatomical research.

The Department of Anatomy is today much concerned with applying the approaches of cell biology, biophysics, and molecular biology to problems of human structure and function. An effort is being made to preserve and develop directions initiated by the first two chairmen in the areas of neurobiology including neuroanatomy, neuroendocrinology, and reproductive biology. The earlier development of physical anthropology is being carried forward strongly.



M. Cartmill, Ph.D.



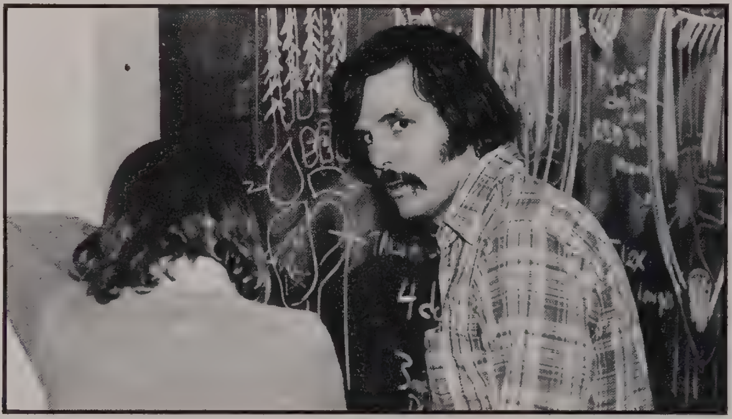
M.J. Moses, Ph.D.

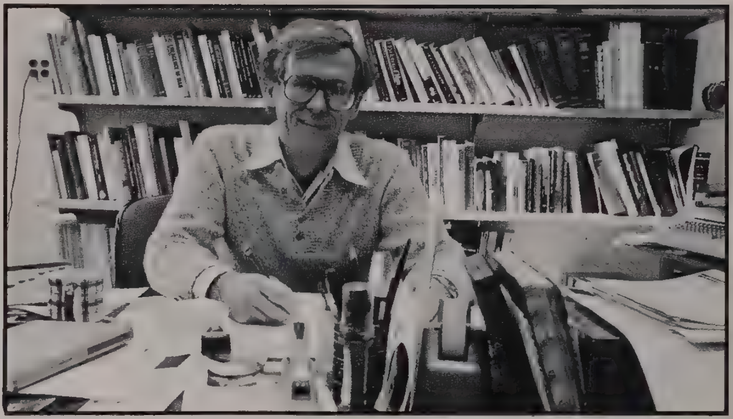
A group concentrating on cellular and molecular biology is primarily responsible for teaching Microscopic Anatomy. A neurobiology group teaches Neuroanatomy, and a physical anthropology group teaches Gross Anatomy.

Electron microscopy is the most prominent technique employed throughout the Department. There are seven transmission electron microscopes, and scanning electron microscope facilities are available in other departments. Much attention is also given to applying both small angle and wide angle x-ray diffraction analysis to biological problems. Equipment on hand includes the most recently developed rotating anode x-ray generators and position-sensitive x-ray detectors with associated computer facilities. There is also equipment devoted to various kinds of image analysis utilizing laser optical and computer methods. Here the Department depends upon the extensive central computer facilities available at Duke University and at the Triangle Computation Center.

The research efforts are focused on the following fields: 1) cell and molecular biology, including structural studies of nuclear apparatus, membranes, muscle microtubules, model systems and developmental biology; 2) neurobiology including studies of the visual and auditory pathways of the brain, retinal rods, cell contact phenomena in retinal and optic tectum, and neuroendocrinology; 3) physical anthropology including human and animal adaptation, evolution and primatology.

H. Erickson, Ph.D.


R. Kay, Ph.D.


W. Hylander, D.D.S., Ph.D.

ANATOMY FACULTY

Row 1 (L to R): J. Robertson, W. Hall, N. Cant, E. Jokoi. **Row 2:** J. Richardson, H. Beall, W. Longley. **Row 3:** H. Erickson, M. Costello, M. Moses, K. Duke, F. Schachat. **Row 4:** T. McIntosh, J. Corless, J. Everett, R. MacPhee. **Row 5:** R. Marchase, K. Lindberg, T. Peele.

James B. Duke Professor: J. David Robertson, M.D. (Harvard, 1945), Ph.D. (Massachusetts Inst. of Tech., 1952), *Chairman.*

Professors: Sheila J. Counce, Ph.D. (Edinburgh, 1954); Montrose J. Moses, Ph.D. (Columbia, 1949); Robert B. Nicklas, Ph.D. (Columbia, 1958); Elwyn Simons, Ph.D. (Princeton, 1956, Oxford, 1959).

Associate Professors: Matthew Cartmill, Ph.D. (Chicago, 1970); Kenneth L. Duke, Ph.D. (Duke, 1940); Harold P. Erickson, Ph.D. (Johns Hopkins, 1968); William C. Hall, Ph.D. (Duke, 1967); William L. Hylander, D.D.S., (Illinois, 1963), Ph.D. (Chicago, 1972); Richard F. Kay, Ph.D. (Yale, 1973); William Longley, Ph.D. (London, 1963); Michael K. Reedy, M.D. (Washington, 1962).

Assistant Professors: Frank H. Bassett, III, M.D. (Louisville, 1957); Nell B. Cant, Ph.D. (Michigan, 1973); Joseph M. Corless, M.D., Ph.D. (Duke, 1972); M. Joseph Costello, Ph.D. (Duke, 1971); Eric L. Effman, M.D. (Indiana, 1967); Emma R. Jakoi, Ph.D. (Duke, 1973); Ross D. MacPhee, Ph.D. (Alberta, 1977); Richard B. Marchase, Ph.D. (Johns Hopkins, 1976); Thomas J. McIntosh, Ph.D. (Carnegie-Mellon, 1973); Frederick H. Schachat, Ph.D. (Stanford, 1974); E. Lee Tyrey, Ph.D. (Illinois, 1969).

Assistant Medical Research Professor: Hie Ping Beall, Ph.D. (Tulane, 1967).

Associates: Arthur C. Chandler, Jr., M.D. (Duke, 1959); Jane S. Richardson, M.A. (Harvard, 1966).

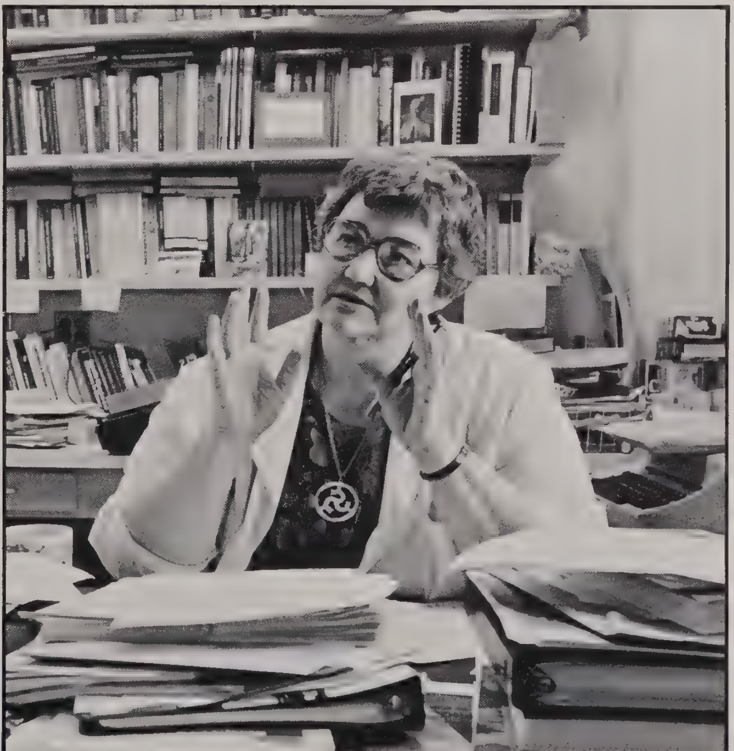
Lecturer: Irving T. Diamond, Ph.D. (Chicago, 1953).

Adjunct Associate: Kenneth A. Lindberg, Ph.D. (Pittsburgh, 1970).

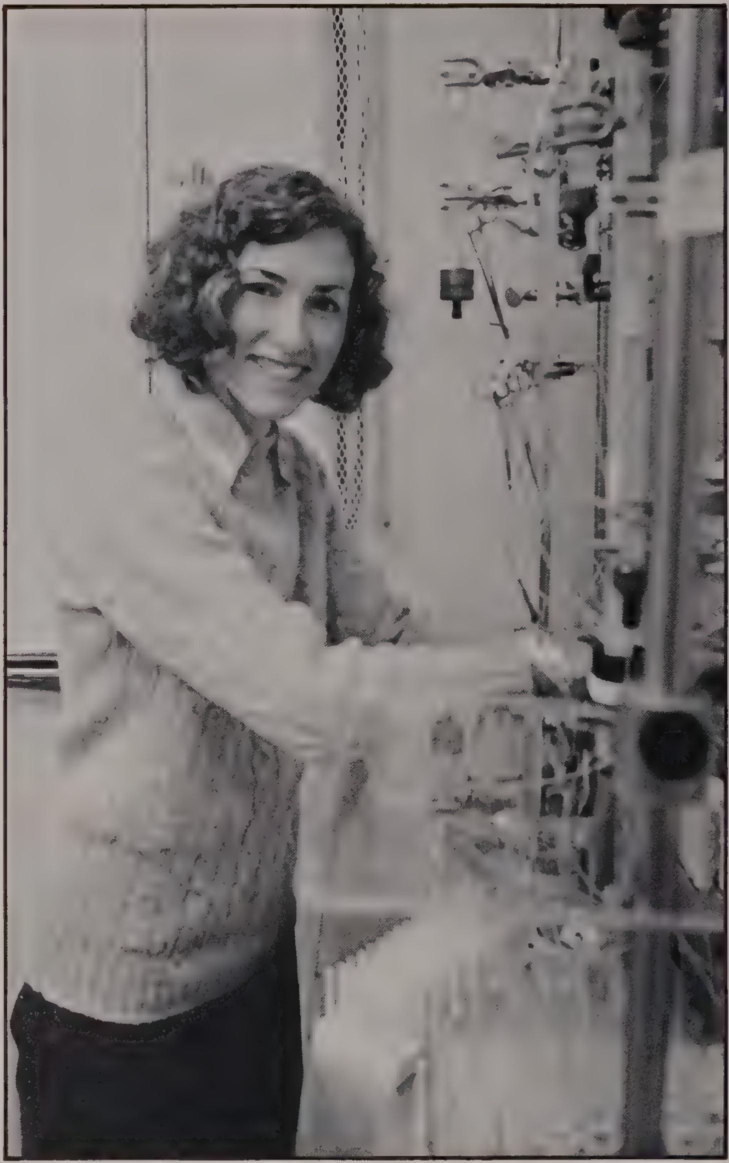
Senior Research Associate: Juan A. Vergara, M.D. (Santiago, Chile, 1953).

Research Associates: Janet A. Hall, M.S. (Brown, 1971); Alan Magid, Ph.D. (U. of Washington, Seattle, 1974); Mary C. Reedy, M.S. (George Washington, 1967); Olga Zampighi, D.D.S. (U. of Chile, Santiago, 1968).

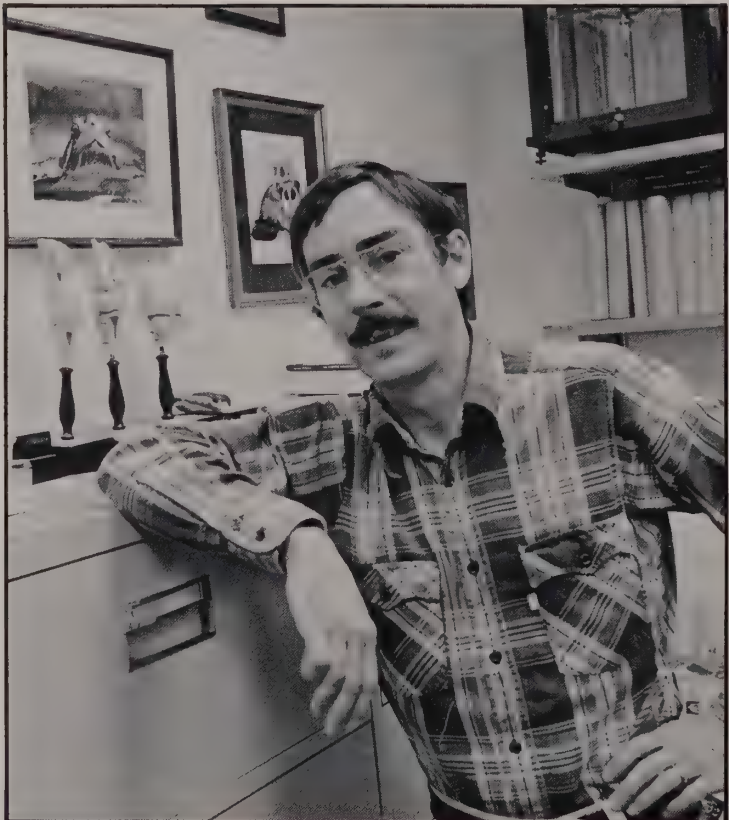
K. Lindberg, Ph.D., and E. Jakoi, Ph.D.

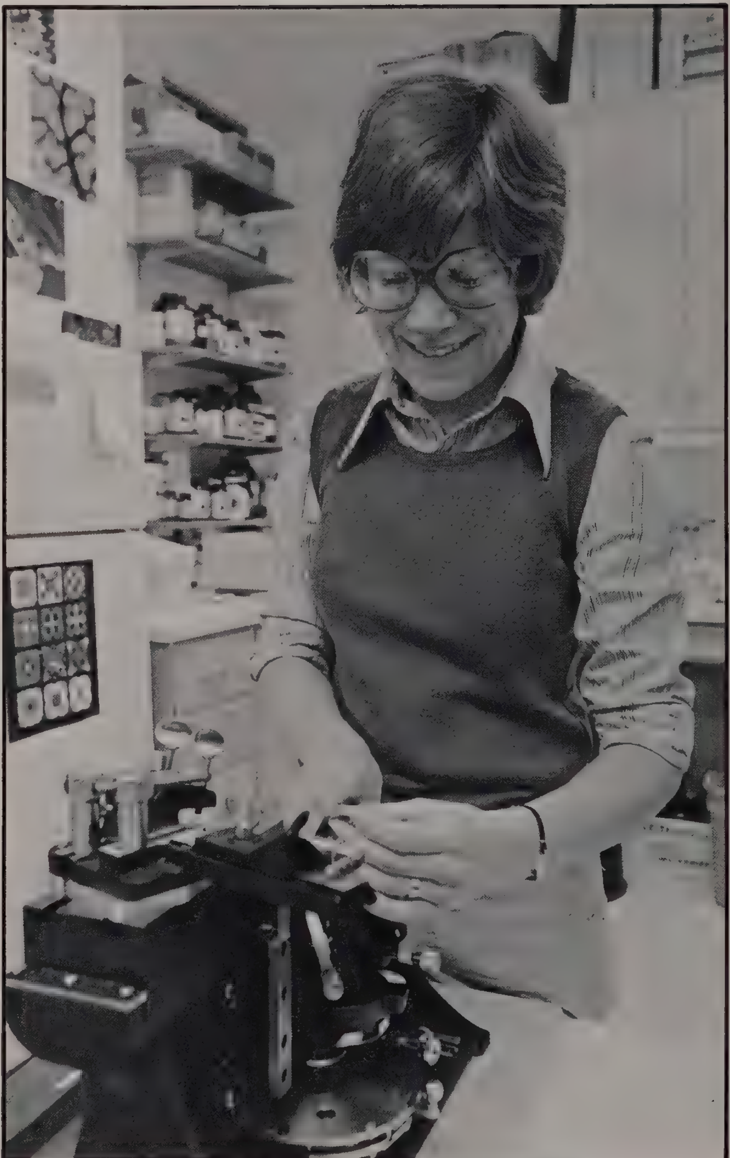


S. Counce, Ph.D.

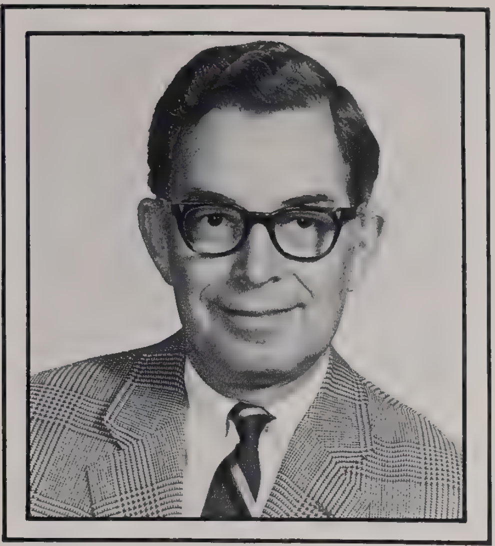

E. Jakoi, Ph.D.

T. Peele, M.D.


W. Hall, Ph.D.


N. Cant, Ph.D.

ANESTHESIOLOGY



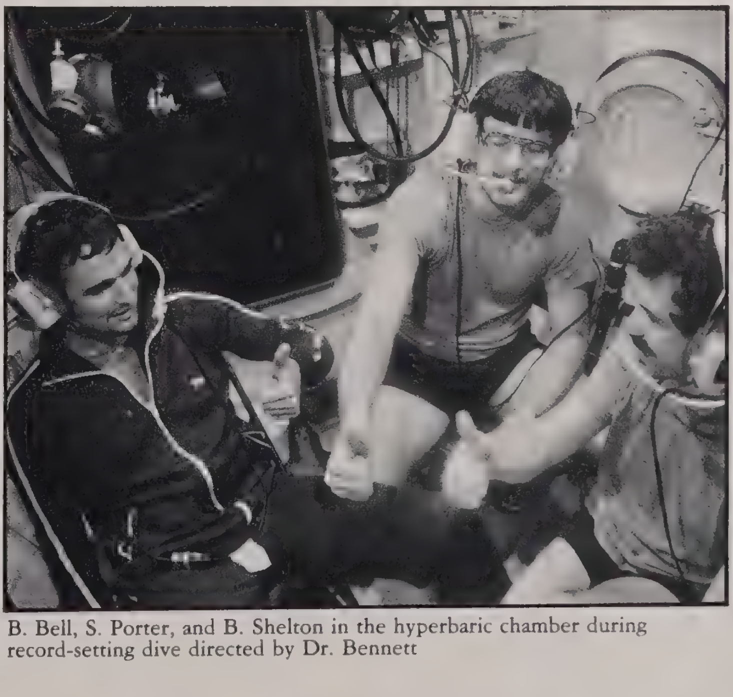
Merel H. Harmel, M.D.
Chairman

Anesthesiology as an academic entity at the Duke University Medical Center did not come into being until 1950 when Dr. C. Ronald Stephen, an eminent anesthesiologist, born and trained in Canada, was appointed associate professor and head of the Division of Anesthesiology in the Department of Surgery. The mainstay for the anesthesia service, since its opening on July 21, 1931, has resided with the nurse anesthetist. Indeed, from its inception there was a school for training nurses in a certificate program. In 1944 Dr. Ruth C. Martin was appointed as a staff anesthesiologist, but she declined the invitation to become the permanent head of the Division. With Dr. Stephen's appointment, a faculty was selected, a full-fledged academic program was developed, a required clerkship in anesthesia was started, a residency training program was begun, and the Division became a nationally recognized center for clinical investigation — especially for new anesthetic adjuvants and agents. When the Durham Veterans Administration Hospital came into being, anesthesiology, with the other clinical specialties, mounted a teaching and research program that was to flourish until 1966 when Dr. Stephen resigned. The ensuing five years were difficult ones. The residency program atrophied, research declined, and the faculty gradually diminished in the face of increasing clinical responsibilities. As acting chairman, Dr. Sara J. Dent held the Department together under the most trying of circumstances. It was not until 1970 when anesthesiology was made an independent department that the situation changed. In 1971 Dr. Merel H. Harmel was appointed as the first Chairman of the Department of Anesthesiology. Since 1971 the Department has grown, re-established an active residency, and engaged in wide ranging research. From six faculty in 1971, there are now twenty-seven clinical anesthesiologists, thirteen scientists, both Ph.D. and M.D., engaged in full-time research, twenty residents, and an established program of teaching and research in the V.A., all of which had languished from 1966-73. The major responsibility for the hyperbaric facility has passed to the Department of Anesthesiology where active involvement in underwater physiology, diving medicine, and inquiry into basic mechanisms of narcosis are vigorously pursued. In addition, there are investigative efforts in respiratory pathophysiology, physiology, neurophysiology and in neuromuscular transmission, toxicology and a variety of clinical investigations relevant to anesthesia. There is a major interest in the physiologic monitoring of the surgical patient. Collaborative research in the basic sciences as well as research with other clinical departments is actively being pursued.

While there had been a required clerkship in anesthesia from 1951-1966, the adoption of the new curriculum resulted in a revised program that consisted of an elective in the fourth year, five sessions in the surgical rotation, and occasional lectures in the basic science core. As a consequence, the medical student's perception of anesthesiology has become severely limited.

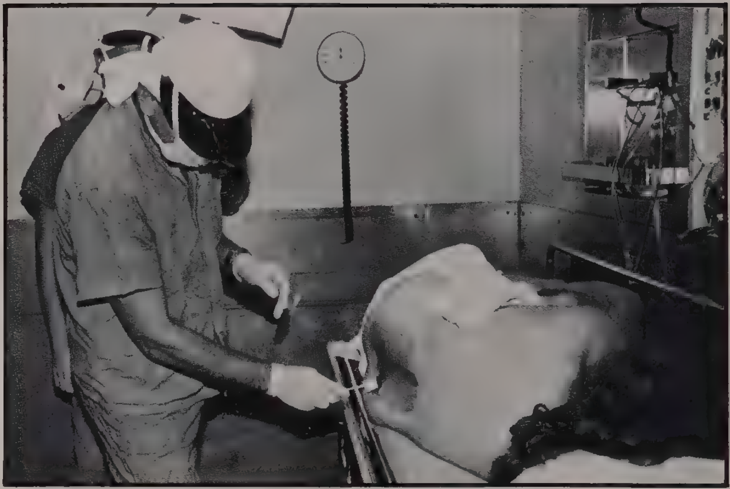
As the Department has evolved it has been divided into eight divisions principally oriented to the specialties: obstetrics, ophthalmology, cardiovascular-thoracic surgery, neurosurgery, pain, pediatrics, hyperbaric medicine and more recently critical care. In addition, there is a bio-engineering division devoted to instrumentation, measurement and the computer interface with anesthesiology.

The Department has grown to meet the many challenges of increasing activity. In the Duke complex, 18,000 anesthetics were administered in 1979, an increase of 5,500 over the number 8 years ago. In addition, 4,500 anesthetics are given yearly in the V.A. It is contemplated that in 1981 the number of anesthetics administered in Duke North and South will be in excess of 22,000. All segments of the Department will have to grow to meet this clinical need and at the same time strive to preserve the forward academic thrust which is now in motion and directed toward providing the best and safest care for patients who come to operation. Greater emphasis is now being directed toward educating students in the areas of life support, critical care and the use of drugs in the anesthetic management of surgical patients; the education and training of physicians in anesthesiology is directed to the end that they are scholars as well as competent clinicians. Lastly we must continue to try to elucidate the phenomena associated with the anesthetic state and its consequences, and for those who come to operation we must try to make this experience a safe passage for that journey which has been described as a voyage between consciousness and oblivion.



B. Bell, S. Porter, and B. Shelton in the hyperbaric chamber during record-setting dive directed by Dr. Bennett

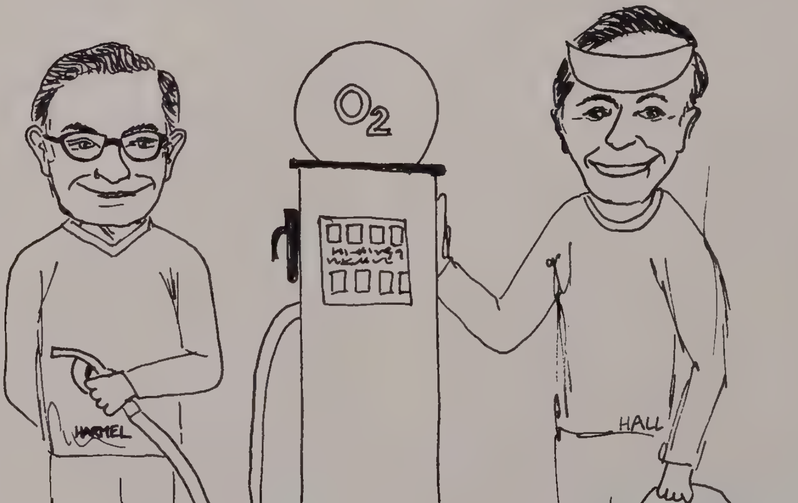
Drs. J. Leslie, P. Lumb, S. Lipson, and M. Harmel



Dr. B. Urban

Dr. K. Hall

Drs. D. Davis and F. Clements



ANESTHESIOLOGY FACULTY

Row 1 (L to R): L. Redick, M. Maroof, E. Bukowski, M. Harmel, S. Weitzner, C. Arancibia. **Row 2:** L. Fagraeus, C. Christian, P. Bromage, P. Stankus, E. Camporesi. **Row 3:** P. Lumb, K. Hall, E. Fox, D. Davis, B. Urban. **Row 4:** J. Miller, V. Vartanian, J. Karis, L. Burton. **Not Pictured:** E. Bloch, A. Groce, J. Jarrell, R. Kosanin, R. McIntyre, W. Murray, B. Schkolne, I. Talton.

Professor: Merel H. Harmel, M.D. (Johns Hopkins, 1943), *Chairman.*

Professors: Peter B. Bennett, Ph.D. (Southampton, England, 1964); Philip R. Bromage, M.B., B.S. (London Univ., 1944); David A. Davis, M.D. (Vanderbilt, 1941); Sara J. Dent, M.D. (Med. Coll. of South Carolina, 1945); Kenneth D. Hall, M.D. (Duke, 1953); Joannes H. Karis, M.D. (State Univ. of Utrecht, Holland, 1952); Lloyd F. Redick, M.D. (Ohio State, 1958); Bruno J. Urban, M.D. (Albertus Magnus, Germany, 1960); Vartan Vartanian, M.D. (Clug Univ. Med. Sch., Rumania, 1951); Stanley W. Weitzner, M.D. (New York Coll. of Med., 1953).

Associate Professors: Enrico Camporesi, M.D. (Univ. of Milan, Italy, 1970); Lennard Fagraeus, M.D., Ph.D. (Karolinska Inst., Stockholm, 1965, 1974); Elisabeth J. Fox, M.B., B.S., (London Univ., 1955); John N. Miller, M.B., B.S. (Univ. of Sydney, 1963); William J. Murray, Ph.D. (Wisconsin, 1959), M.D. (U.N.C. at Chapel Hill, 1962); Ingeborg H. Talton, M.D. (Frankfurt/Main, 1951, Geissen, 1952).

Associate Clinical Professors: M. Bourgeois-Gavardin, M.D. (Univ. of Paris, 1954; Duke, 1955); Charles F. Lanning, M.D. (Kansas, 1969).

Assistant Professors: Edmond C. Bloch, M.B., Ch.B. (Univ. of Cape Town, South Africa, 1946); Elaine M. Bukowski, M.D. (S.U.N.Y., Buffalo, 1974); Charles M. Christian, II, Ph.D., M.D. (Louisiana, 1971, 1975); Gregg Friedman, M.D. (Duke, 1976); M. Ann Groce, M.D. (U.N.C. at Chapel Hill, 1972); Radoslav Kosanin, M.D. (Univ. of Beograd, Yugoslavia, 1965); Philip D. Lumb, M.B., B.S. (London Univ., 1974); Mohammad Maroof, M.D. (Liaquat Med. Coll., Pakistan, 1964); R. William McIntyre, M.D. (Univ. of British Columbia, 1970); Benzion Schkolne, M.B., Ch.B. (Univ. of Cape Town, South Africa, 1972).

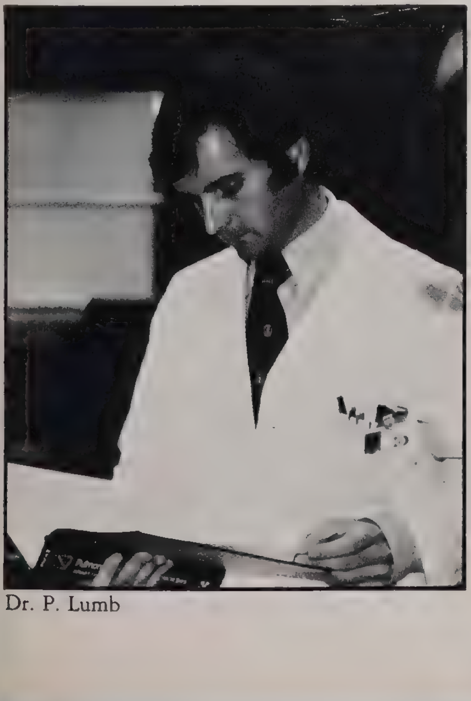
Assistant Medical Research Professors: Charles E. Johnson, Ph.D. (Duke, 1975); James L. Parmentier, Ph.D. (California at Santa Barbara, 1972); Brij B. Shrivastav, Ph.D. (Univ. of Western Ontario, 1968); Sidney A. Simon, Ph.D. (Northwestern, 1973); Richard Vann, Ph.D. (Duke, 1976).

Adjunct Assistant Professor: Fritz F. Klein, Ph.D. (Duke, 1973).

Assistant Clinical Professors: Patrick J. Breen, M.B., B.S. (Royal Coll. of Surgeons, Ireland, 1959); J. Howard J. Brown, M.D. (Boston, 1967); Luther C. Hollandsworth, M.D. (Bowman Gray, 1951); John A. Jarrell, Jr., M.D. (Johns Hopkins, 1949); Stanley J. Rosenberg, M.D. (Michigan, 1968).

Associates: Carlos U. Arancibia, M.D. (Univ. of Chile, 1969); Paul V. Stankus, M.D. (U.N.C. at Chapel Hill, 1976).

Research Associate: Larry W. Burton, Ph.D. (Duke, 1977).



Dr. P. Lumb

Drs. M. Harmel and I. Talton

Dr. H. Karis

ANESTHESIOLOGY RESIDENTS

Row 1 (L to R): S. Hauser, M. Matchett, C. Plummer, D. Chestnut, H. Chung. **Row 2:** B. Smith, E. Steinberger, T. Remandaban, J. Leslie. **Row 3:** F. Block, C. McNamara, R. Ballin, L. George. **Not Pictured:** G. Crisp, B. Johnson, H. Louka, Z. Rahman, D. Shapiro, A. Vyas.

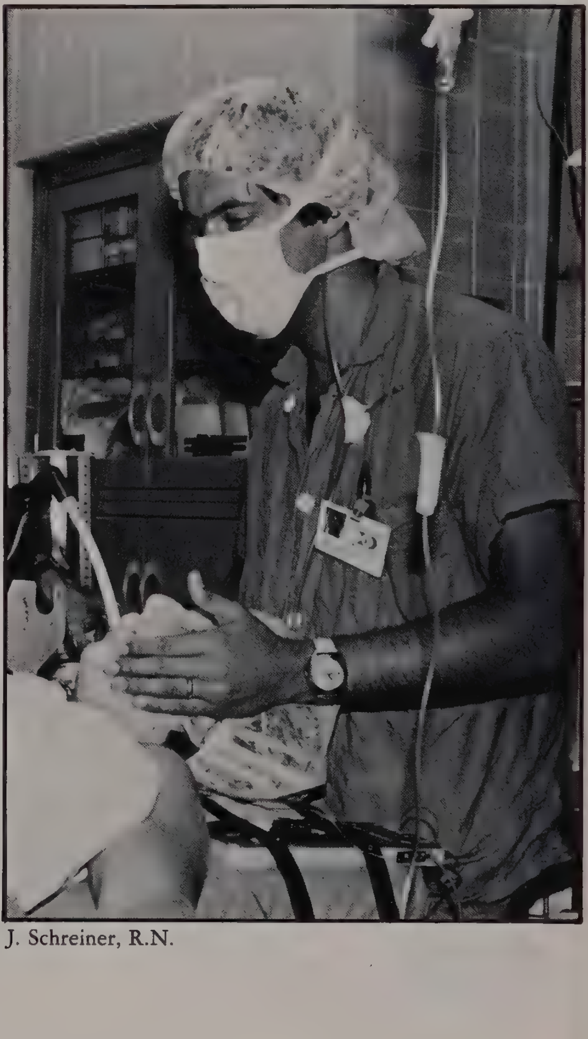
Chief Residents: David H. Chestnut, M.D. (Univ. of Alabama, 1978); John B. Leslie, M.D. (Duke, 1976).

Fellows: Frank E. Block, Jr., M.D. (Univ. of Virginia, 1976); Bruce A. Smith, M.D. (Univ. of Arkansas, 1976).

Senior Residents: Hun Taek Chung, M.D. (Yonsei Univ., Korea, 1972); Lynn D. George, M.D. (George Washington Univ., 1956); Hany H. Louka, M.D. (Cairo Univ., Egypt, 1971); Ziaur Rahman, M.D. (Prince of Wales Med. Coll., India, 1968); Teodulo Remandaban, M.D. (Cebu Inst. of Med., Philippines, 1972); R. Michael Matchett, M.D. (Kentucky, 1977).

Junior Residents: Gregory H. Crisp, M.D. (U.N.C. at Chapel Hill, 1978); Betty H. Johnson, M.D. (Univ. of West Va., 1974); Charles R. McNamara, D.D.S. (Tufts Univ. School of Dental Med., 1979); Charles W. Plummer, M.D. (Duke, 1978); Daniel A. Shapiro, M.D. (U.N.C. at Chapel Hill, 1978); Eileen K. Steinberger, M.D. (Univ. of Michigan, 1979); Anil M. Vyas, M.D. (Government Med. Coll., India, 1972).

C. Plummer, M.D.



J. Schreiner, R.N.

BIOCHEMISTRY

Robert L. Hill, Ph.D.
Chairman

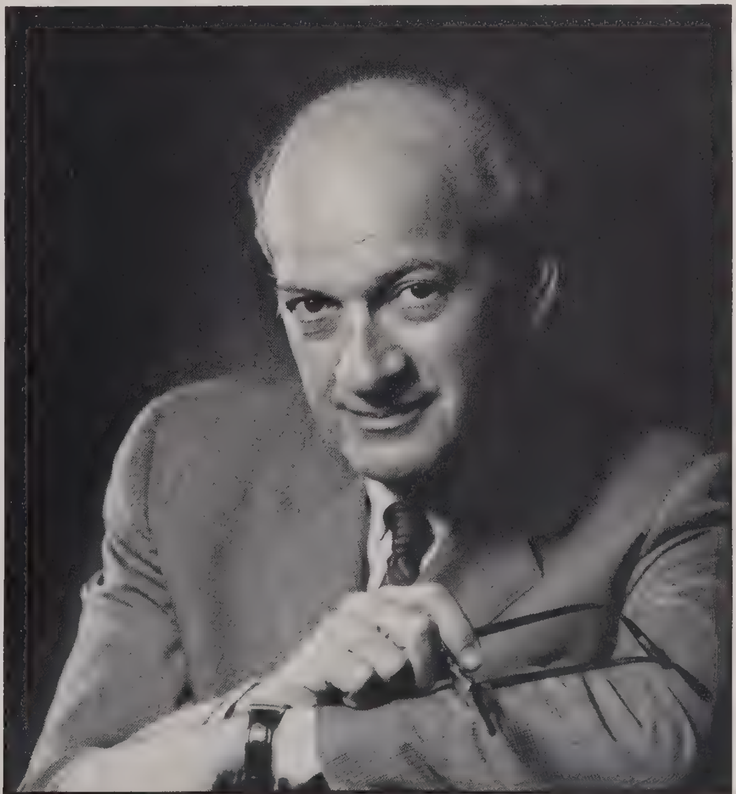
The Department of Biochemistry was among the original departments that formed the School of Medicine at Duke University. Its faculty in 1930, the year the school accepted its first students, totaled four: Dr. William A. Perlzweig, Professor and Chairman; Dr. Haywood Taylor, Assistant Professor in charge of the clinical chemistry laboratories of Duke Hospital; and Mrs. Susan Smith and Dr. Mary L.C. Bernheim, Instructors. Dr. Bernheim is presently Professor Emeritus of Biochemistry and remains active today in teaching and research.

Departmental archives do not contain the records of students in medical biochemistry for 1930, but thereafter detailed records are available and reflect the fact that biochemistry was a major part of the medical education for all first year students, just as it is today. The biochemistry taught in the 1930's was vastly different from that of 1980. Students then dwelt at length on aspects of nutrition and the suspected metabolic origins and fates of the major constituents of blood and urine. Laboratory work was emphasized, especially chemical analyses of blood and urine. One of the textbooks used in the course was Hawk, Oser and Summerson's, *Practical Physiological Chemistry,* which was first published in 1910 and was in its tenth edition in 1949. Its table of contents reveals some chapter headings identical to those in more modern texts, but inspection of the material presented to these chapters shows little relationship to what we know about these subjects today. The nature of double helical DNA, the molecular basis of enzyme catalysis, the detailed pathways of metabolism, the genetic basis of human disease, the specific metabolic roles of the vitamin confactors, and the molecular mechanisms of protein synthesis were largely unknown, as were many other aspects of biochemistry now take as facts by today's medical students.

Research programs in biochemistry during the early years of the Department's life were somewhat limited compared to those of today, but under the leadership of Dr. Perlzweig and Dr. W.J. Dann, Professor of Physiology and Nutrition, Duke became known as a center for nutritional research, and in particular, for studies on vitamin B_1, nicotinic acid, which when deficient in the diet leads to pellagra in man, a disease endemic to Durham in the 1930's. Related to this research were notable studies on amino acid metabolism by Drs. Frederick and Mary Bernheim as well as by Dr. Philip Handler, who came to Duke in 1939 directly from his Ph.D. studies at Illinois to work with Dr. Dann. Dr. Hans Neurath joined the Biochemistry faculty in 1937, and his important research that still continues at the University of Washington, Seattle, laid the foundation for the Department's reputation as a center of excellence in protein and enzyme chemistry, a position it continues to hold.

After the death of Dr. Perlzweig in 1949, Dr. Philip Handler assumed the chairmanship of the Department in 1950. He was to serve as Chairman until 1969, and under his leadership the Department changed more dramatically than at any time in its history. By 1955, the research laboratories for biochemistry had been moved from what is now the Davison Building to the Bell Building, where they remained until 1968, when they were then relocated to their present departmental space in the Nanaline H. Duke Building, which also currently houses the Departments of Physiology and Pharmacology. Dr. Handler recruited a number of new faculty, so that by 1969, sixteen biochemists had primary appointments in the Department. Thus, Duke became internationally known for its excellence in several research areas, particularly in protein chemistry, enzymology, lipid metabolism and molecular genetics.

Dr. Handler's leadership was also responsible for the development of many educational programs in Bichemistry. The Ph.D. program was judged in 1968 to be among the top ten in the nation, and its graduates occupy faculty positions in major medical centers throughout the world. The research training program in Cell Biology was begun in 1959 under the guidance of Dr. Handler and Dr. Eugene Stead, then Chairman of the Department of Medicine; it provided a unique opportunity for Duke medical students and residents to learn the research methodologies and the current knowledge available in several of the basic medical sciences. Perhaps of equal significance was the fact that the research training program served as a model for important parts of the new curriculum introduced into the Medical School in 1966. Dr. Handler also fostered the development of a University Program in Genetics, which bridged the



Philip Handler, Ph.D.

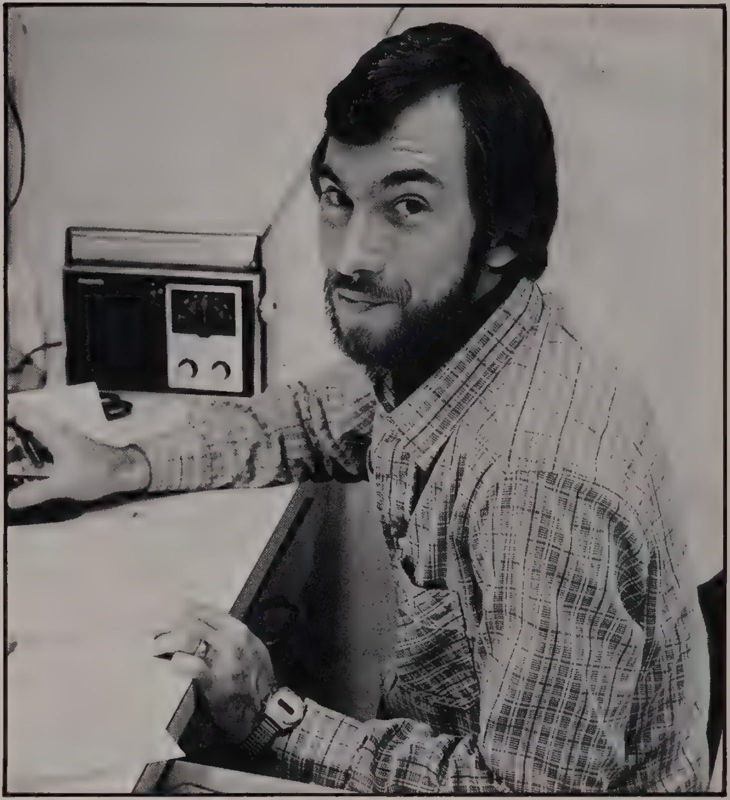
activities of several faculty, including those of Botany and Zoology in Trinity College, with Dr. Samson Gross, Professor of Biochemistry, as Program Director. Members of the program introduced a course in Medical Genetics into the first year curriculum in 1968, and it remains an essential part of the Department's activities today.

Education in medical biochemistry at Duke has kept pace with the rapid strides in biochemical research that began about the time Dr. Handler became Chairman, in no small part because of the publication of the text, *Principles of Biochemistry,* which Dr. Handler co-authored with Dr. Abraham White, then at the Albert Einstein School of Medicine, and Dr. Emil L. Smith, then at the University of Utah. The first edition of the text appeared in 1954, and its subsequent editions have been used by Duke medical students, as well as many others throughout the world since that time. Now in its sixth edition, with the addition of Dr. I.R. Lehman at Stanford University and Dr. R.L. Hill, current Chairman of Biochemistry at Duke as coauthors, it remains the official text for the first year course in medical biochemistry and is a valued refernce book for many.

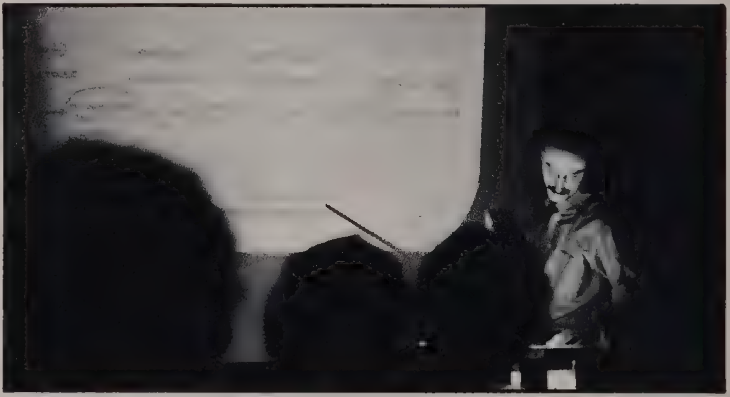
Dr. Handler resigned as Departmental Chairman in 1969 to become President of the National Academy of Sciences in Washington, D.C., a position that attests to the stature he holds among scientists. He remains on leave from the University as James B. Duke Professor of Bichemistry and Nutrition, and his colleagues look forward to his return to Duke in 1981, when his term as President of the Academy is completed.

In the past decade the Biochemistry Department has continued on the path of excellence started by Drs. Perlzweig and Handler. Many faculty are noted for their unique and important research contributions, but lack of space does not permit listing their many accomplishments.

Nevertheless, Biochemistry is healthy and vigorous as it enters into the next fifty years of life at Duke, largely as the result of the dedication of those faculty, fellows and students who represent the discipline at Duke and are responsible for carrying on the tradition of excellence in teaching and research begun by a dedicated group of four faculty and some forty medical students in 1930.



P. Robertson, Ph.D.



D. Armaleo

BIOCHEMISTRY FACULTY

Sitting (L to R): M. Bernheim, S. Pizzo, H. Kamin, R. Hill, P. Modrich, R. Greene, D. Steege, K. McCarty, Sr. **Standing:** A. Greenleaf, K. Rajagopalan, S. Gross, L. Siegel, I. Fridovich, D. Richardson, W. Guild, R. Webster, H. Sage, Y. Nozaki, B. Kaufman, R. Wheat.

James B. Duke Professor: Robert L. Hill, Ph.D. (Kansas, 1954), *Chairman.*

Professors: Professor Emeritus Mary L.C. Bernheim, Ph.D., (Cambridge, England, 1928); James B. Duke Professor Irwin Fridovich, Ph.D. (Duke, 1955); Samson R. Gross, Ph.D. (Columbia, 1953); Walter R. Guild, Ph.D. (Yale, 1951); James B. Duke Professor Philip Handler, Ph.D. (Illinois, 1939); Jerome S. Harris, M.D. (Harvard, 1933); Henry Kamin, Ph.D. (Duke, 1948); Norman Kirshner, Ph.D. (Pennsylvania State, 1952); Kenneth S. McCarty, Ph.D. (Columbia, 1957); K.V. Rajagopalan, Ph.D. (Univ. of Madras, 1957); Robert Webster, Ph.D. (Duke, 1965).

Associate Professors: Robert M. Bell, Ph.D. (California, 1970); Ronald C. Greene, Ph.D. (California Inst. of Tech., 1954); Bernard Kaufman, Ph.D. (Indiana, 1961); Sung-Hou Kim, Ph.D. (Pittsburgh, 1966); William S. Lynn, Jr., M.D. (Columbia, 196); Paul Modrich, Ph.D. (Stanford, 1973); David C. Richardson, Ph.D. (Massachusetts Inst. of Tech., 1967); Harvey J. Sage, Ph.D. (Yale, 1958); Lewis Siegel, Ph.D. (Johns Hopkins, 1965); J. Bolling Sullivan, Ph.D. (Texas, 1966).

Assistant Professors: Arno L. Greenleaf, Ph.D. (Harvard, 1974); Robert L. Habig, Ph.D. (Purdue, 1966); Michael Herschfield, M.D. (Pennsylvania, 1967); Edward Holmes, M.D. (Pennsylvania, 1967); Nicholas Kredich, M.D. (Michigan, 1962); Robert Lefkowitz, M.D. (Columbia, 1966); Patrick A. McKee, M.D. (Oklahoma, 1962); Salvatore V. Pizzo, M.D., Ph.D. (Duke, 1973); Deborah A. Steege, Ph.D. (Yale, 1974); Allen David Roses, M.D. (Pennsylvania, 1967); Robert W. Wheat, Ph.D. (Washington, 1955).

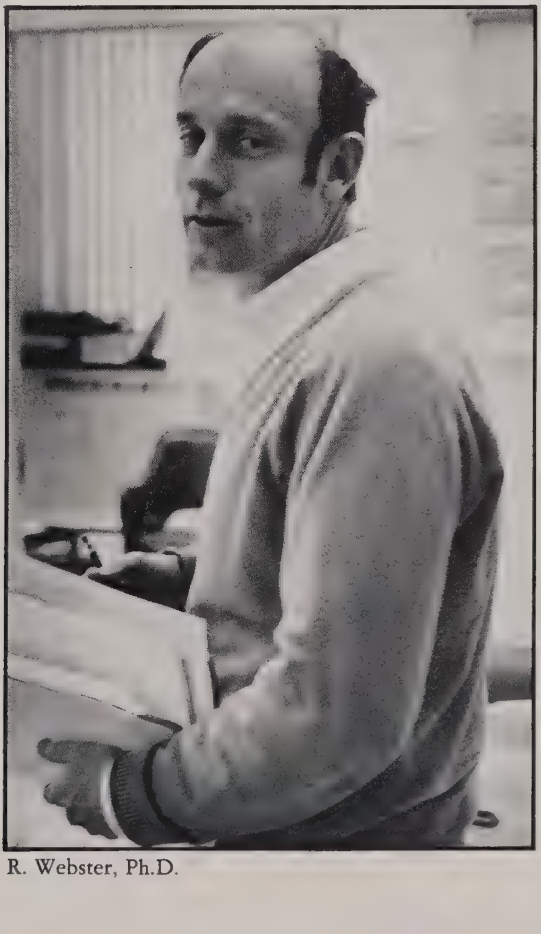
Assistant Medical Research Professors: Celia Bonaventura, Ph.D. (Texas, 1968); Joseph Bonaventura, Ph.D. (Texas, 1968); Marc G. Caron, Ph.D. (Florida, 1973).

Adjunct Assistant Professor: Per-Otto Hagen, F.H.W.C. (Watt Univ., Scotland, 1961).

Associates: John Bittikofer, Ph.D. (Purdue, 1971); Yasuhiko Nozaki, Ph.D. (Univ. of Tokyo, 1945).

Research Associates: Charles J. Alden, Ph.D.; Nancy K. Amy, Ph.D.; Thomas Andersen, Ph.D.; Frederick Archibald, Ph.D.; Lawrence M. Ballas, Ph.D., Edward Baptist, Ph.D.; Michael Barber, Ph.D.; Karl Beem, Ph.D.; Sambhunath Bhattacharyya, Ph.D.; Michael A. Bleyman, Ph.D.; Donald Bowden, Ph.D.; Keith Carson, Ph.D.; Nico Cerlitti, Ph.D.; Kenneth Dean, Ph.D.; Allen Eckhardt, Ph.D.; J. William Freytag, Ph.D.; Susan Gidwitz, Ph.D.; Lowrie Glasgow, M.D.; Murray Grigor, Ph.D.; Earl Guthrow, M.D.; Peter Hardwicke, Ph.D.; Robert Harrison, Ph.D.; H. Moustafa Hassan, Ph.D.; Jean R. Johnson, Ph.D.; David Lambeth, Ph.D.; Jack Lancaster, Ph.D.; Timothy Larson, Ph.D.; Freeman Ledbetter, Ph.D.; Carson Loomis, Ph.D.; Dwight Martin, Ph.D.; Joseph Martin, Ph.D.; Al Merrill, Ph.D.; Nirupama Mohapatra, Ph.D.; Shakti Mukherjee, Ph.D.; Izumi Ohkawa, Ph.D.; Philmore Robertson, Jr., Ph.D.; John C. Salerno, Ph.D.; Whanchul Shin, Ph.D.; David Straight, Ph.D.; Guido A. Zampighi, Ph.D.

R.M. Bell, Ph.D., and K.V. Rajagopalan, Ph.D.



R. Webster, Ph.D.

BIOCHEMISTRY GRADUATE STUDENTS

Row 1 (L to R): D. Kelner, T. Yen, K. Brawn, J. Blum, T. Michel, P. Green, J. Lopez, V. Lightner, K. Kelin, S. Adler. **Row 2:** R. Wahl, S. Priebe, J. Walsh, D. McRee, J. DiGuiseppi, C. Oppenheimer, S. Cheng. **Row 3:** G. Kidd, T. Kirby, W. Jack, L. Pike, J. Wilkerson, J. Albanesi, M. Smith, D. Armaleo, K. Blumer. **Row 4:** J. Biggs, J. Abernethy, D. Kilpatrick, T. Beyer, R. Grant, M. Sellitti, D. Mold, G. Gick, D. Coulter, B. Hainline, G. Herman, M. Lehrman, M. Imber. **Row 5:** S. Singer, M. Adams, L. Mimms, C. Saunders, D. Lubahn. **Not Pictured:** C. Batie, D. Bickar, M. Brenowitz, A. Feister, K. Freidman, E. Getzoff, P. Janick, M. Johnson, M. Litzenberger, D. McCaslin, K. Ney, R. Rubin, R. Ruhlen, J. Tainer, G. Tomlinson, T. Young.

BIOCHEMISTRY RESEARCH ASSOCIATES

Row 1 (L to R): T. Andersen, W. Freytag, M. Barber, E. Baptist, F. Archibald, N. Cerlitti. **Row 2:** L. Glasgow, K. Dean, J. Salerno, P. Robertson, Jr., C. Alden. **Row 3:** C. Loomis, D. Bowden, A. Merrill, T. Larson, S. Gidwitz, K. Beem. **Row 4:** R. Watt, A. Eckhardt, N. Amy, J. Martin, J. Johnson. **Not Pictured:** L. Ballas, S. Bhattacharyya, M. Bleyman, M. Grigor, P. Hardwicke, D. Lambeth, J. Lancaster, D. Martin, N. Mohapatra, S. Mukherjee, I. Ohkawa, M. Rose, W. Shin, R. Whitesell, G. Zampighi.

K. Blumer, D. McRee, J. Lopez, J. Wilkerson, J. Biggs, and R. Hill, Ph.D.

J. Lancaster, Ph.D.; T. Michel; T. Kirby; and S. Gidwitz, Ph.D.

COMMUNITY AND FAMILY MEDICINE

E. Harvey Estes, Jr., M.D.
Chairman

In 1965, a faculty committee was appointed to study the future role of preventive medicine in the Duke curriculum and to make recommendations regarding the future of the Department of Preventive Medicine. The committee concluded that a new Department of Community Health Sciences should be formed. It was seen as focusing on teaching the medical student about those problems related to the organization and delivery of health care (both preventive and remedial) to groups of patients in contrast with problems presented by an individual patient. These concerns included access to care, cost of care, convenience and dignity of care, and organization and efficiency of care. The new department was seen as utilizing such diverse disciplines as economics, the social sciences, computer science, management science, and others in achieving its goals. The disciplines of biostatistics and epidemiology were also included in its scope.

The Department began in July, 1966. In 1967, the Physician's Associate Program was relocated to the Department. This initiated the activities of the Department in exploring the uses of intermediate levels of health manpower.

Throughout the early years of the Department, it was obvious that the public was interested in a more accessible type of medical practitioner, who was able to offer preventive maintenance, continuity of care, and a correlative function between the patient and his family and a complex medical system. In 1970, the Family Medicine Program began. This new program added a very useful clinical focus to the activities of the Department, and the program now offers a new and much needed role model for the medical students. In 1978, to more accurately reflect these activities, the Department name was changed to Community and Family Medicine.

In July, 1979, the Departments of Health Administration and Community and Family Medicine were combined into a new administrative structure, the Division of Health Sciences Education. Dr. E. Harvey Estes, the Chairman of the Department of Community and Family Medicine, was named as its Director. Still another entity, the Health Policy Center, will be added to the Division when it is activated.

The new Divison and its component Departments are currently studying ways in which joint teaching, research and service can be conducted in such a way that the result is more than the sum of the parts. The new Division will begin to offer conferences and teaching sessions based on these new relationships in 1980.

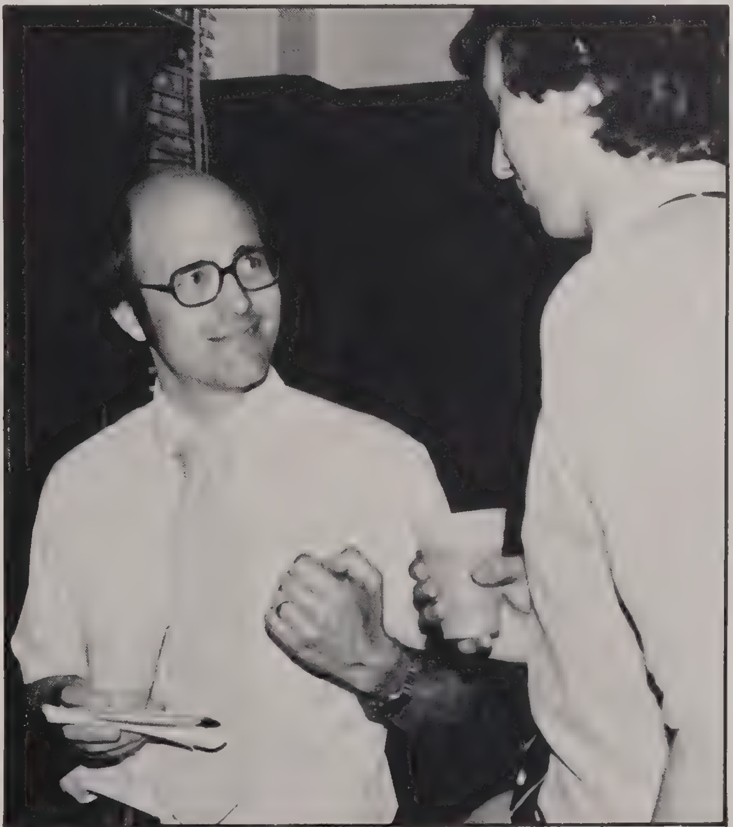
The Department teaches both "basic" and "clinical" topics. Its first contact with students is in the Interterm, during which it teaches a course divided into three parts. The first part covers current issues in health care delivery. The other two segments are epidemiology and biostatistics.

The Department has no teaching responsibilities in Year 2, though it is actively attempting to obtain a mandatory rotation in a community setting during this segment of the curriculum. It is hoped that this experience would more fully acquaint the student with the true nature of medical practice and the function of the physician within the community.

In Year 3, the Department has a variety of offerings. The most recent is a Study Program in Epidemiology, which combines didactic instruction in epidemiology and biostatistics with a research project. Other major offerings include courses in medical history, medical ethics, medicolegal issues, computers in medicine, etc.

In the fourth year, the Department offers several clinical rotations, in the broad area of primary care, ranging from experiences with family physicians in small communities, to rotations in the Family Medicine Center, the practice base for the Family Medicine residency.

In addition to formal course offerings, the Department is very active in working with student organizations interested in primary care and the broad organizational and ethical issues affecting the profession. Members of the Department work with the Forum for Primary Care, assisting this organization with publications and conferences. The Department also helps students organize seminars on broad issues involving medicine. It also works with organizations such as the North Carolina Academy of Family Practice and the North Carolina Medical Society as they attempt to interface with medical students.



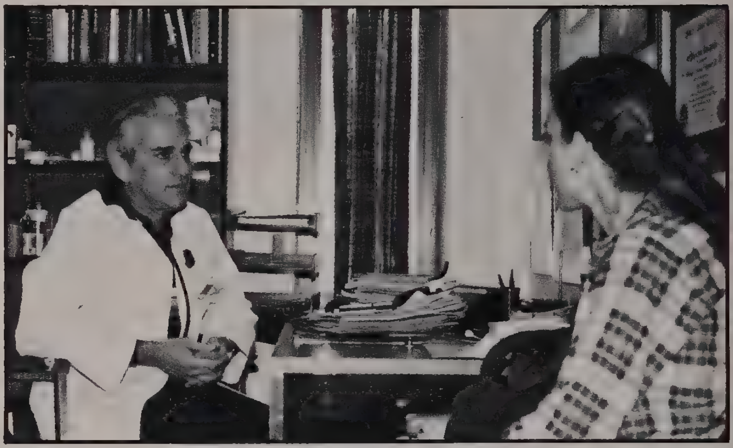
Robert Sullivan, M.D.

The Department's major administrative headquarters are located in the ground floor of Trent Drive Hall (the Graduate Center). Clinical activities are located in the Marshall I. Pickens Building, and in the Family Medicine Center on the campus of the Durham County General Hospital. The latter is the teaching base for the Family Medicine residency. Still another base of operation is in the Allied Health Building at the Durham Veterans Administration Hospital, where all of the classroom work for the Physician's Associate Program is located. The Medical History program is located in the Seeley G. Mudd Medical Library.

As an overall summary, the Department of Community and Family Medicine has grown steadily and has enlarged both its elective offerings and its faculty over the years. As a department without a defined niche, it has been forced to carve its own. With the student as an ally, it has often been an agent for change within the Medical Center, both in basic and clinical teaching.

Stephen Gehlbach, M.D.

Floyd Hagan, M.B.A., and Katharine Munning, Ph.D.



Melvin Berlin, M.D.

Professor: E. Harvey Estes, Jr., M.D. (Emory, 1947), *Chairman.*

Assistant Professor: Robert J. Sullivan, M.D. (Cornell, 1966), M.P.H. (U.N.C. at Chapel Hill, 1973), *Vice-Chairman.*

COMMUNITY HEALTH MODELS DIVISION

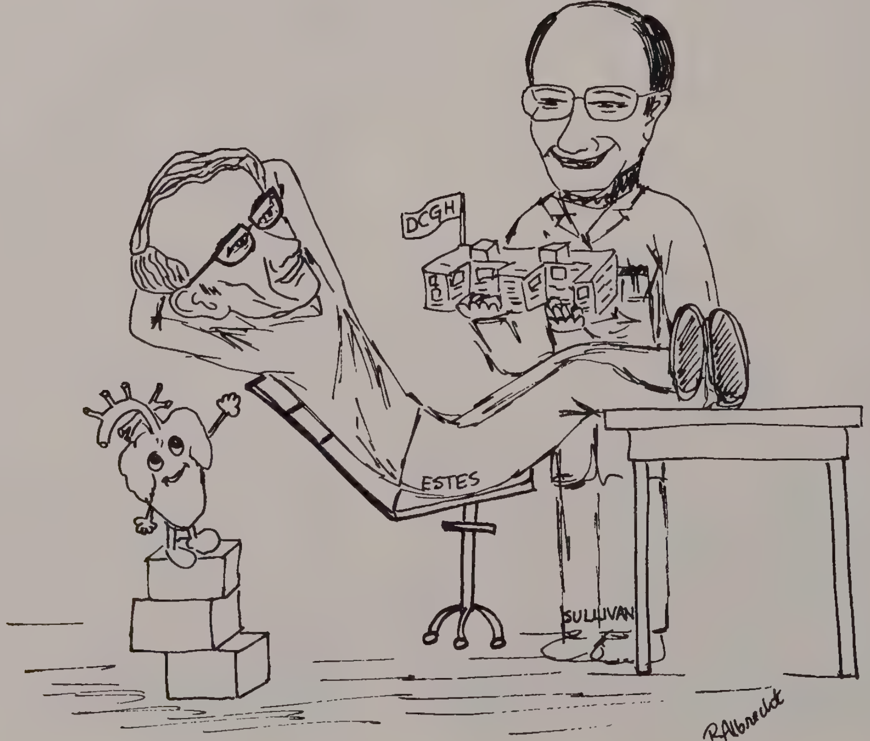
Professor: Eva J. Salber, M.D. (Cape Town, South Africa, 1955), *Chief.*

Associate: Shirley E. Callahan, M.P.H. (U.N.C. at Chapel Hill, 1958).

EDUCATION DIVISION

Assistant Professor: Robert J. Sullivan, Jr., M.D. (Cornell, 1966), M.P.H. (U.N.C. at Chapel Hill, 1973), *Chief.*

Professors: Thomas E. Frothingham, M.D. (Harvard, 1951); Clark C. Havighurst, J.D. (Northwestern, 1958); Siegfried H. Heyden, M.D. (U. of Berlin, Germany, 1951); Harmon L. Smith, Ph.D. (Duke, 1962).



COMMUNITY AND FAMILY MEDICINE FACULTY

Row 1 (L to R): G. Solovieff, J. Bobula, W. Wilkinson, D. Muhlbaier, R. Sullivan, S. Warburton. **Row 2:** M. Morris, J. Newsome, D. Naumann, E. Salber, L. Hartwig, D. Reich, M. Hilton. **Row 3:** E. Pope, D. McGrath, J. Crellin, M. Helms, F. Romm, A. Hathaway, H. Estes, M. Hamilton. **Row 4:** R. Joslin, W. Kane, J. Schmidt, B. Lafferty, M. Berlin, D. Deubner.

Associate Professors: John K. Crellin, Ph.D. (U. of London, England, 1969), L.R.C.P., M.R.C.S. (U. of London, England, 1974); James F. Gifford, Jr., Ph.D. (Duke, 1969); Paul B. Ginsburg, Ph.D. (Harvard, 1971); William E. Hammond, Ph.D. (Duke, 1967).

Assistant Professors: Allen R. Dyer, M.D. (Duke, 1972); Carol C. Hogue, Ph.D. (U.N.C. at Chapel Hill, 1974); Frederick R. Jelovsek, M.D. (Michigan, 1969); Joseph Lipscomb, Jr., Ph.D. (U.N.C. at Chapel Hill, 1975); Diana E. McGrath, Ph.D. (Pennsylvania, 1974); Ramon Velez, M.D. (New York U., 1970); Ruby L. Wilson, Ed.D. (Duke, 1968).

Associates: Lynn C. Hartwig, M.A. (U.N.C. at Chapel Hill, 1972); Robert A. Rosati, M.D. (Duke, 1967); Beverly K. Rosen, M.S.W. (U.N.C. at Chapel Hill, 1974); Nancy R. Shaw, J.D. (Duke, 1973).

Assistant Medical Research Professor: Nancy R. Mendell, Ph.D. (U.N.C. at Chapel Hill, 1972).

Research Associate: E. Edgar Cockrell, III, M.S.P.H. (U.N.C. at Chapel Hill, 1975).

EPIDEMIOLOGY AND BIOSTATISTICS DIVISION

Assistant Professor: William E. Wilkinson, Ph.D. (U.N.C. at Chapel Hill, 1968), *Chief.*

Professor: Max A. Woodbury, Ph.D. (Michigan, 1948).

Assistant Professors: Elizabeth R. DeLong, Ph.D. (U.N.C. at Chapel Hill, 1979); David C. Deubner, M.D. (Rochester, 1971); Daniel T. Gianturco, M.D. (Buffalo, 1960); Frank E. Harrell, Jr., Ph.D. (U.N.C. at Chapel Hill, 1979); Kerry L. Lee, Ph.D. (U.N.C. at Chapel Hill, 1974); Frederick J. Romm, M.D., M.P.H. (Harvard, 1970); Helen Hai-Ling Wang, M.B. (National Taiwan U., Taipei, Republic of China, 1975), M.P.H. (Harvard, 1976).

Assistant Medical Research Professor: Kenneth G. Manton, Ph.D. (Duke, 1974).

Research Associates: Michael Helms, B.S. (U.N.C. at Chapel Hill, 1971); Lawrence H. Muhlbaier, M.S. (U.N.C. at Chapel Hill, 1977).

FAMILY MEDICINE DIVISION

Associate Professor: William J. Kane, M.D. (Temple, 1969), *Chief.*

Associate Professor: Samuel W. Warburton, Jr., M.D. (Pennsylvania, 1969).

Assistant Professors: James A. Bobula, Ph.D. (Ohio State, 1972); Stephen H. Gehlbach, M.D. (Western Reserve, 1968); Ann L. Moore, M.D. (Columbia, 1972); James T. Moore, M.D. (Columbia, 1971); Katharine A. Munning, Ph.D. (Iowa, 1979); George R. Parkerson, M.D. (Duke, 1953), M.P.H. (U.N.C. at Chapel Hill, 1977).

Associate: Randal D. France, M.D. (Texas, 1973).

Clinical Assistant Professors: Andrew L. Finn, Pharm. D. (Michigan, 1975); R. Derek Prentice, M.B., Ch. B. (Edinburg U., Scotland, 1970); William J. Taylor, Pharm. D. (Tennessee, 1976).

Clinical Associates: Christina De La Torre, M.D. (Buenos Aires State U., Argentina, 1972); Stephen W. Friedman, M.D. (Tulane, 1971); Belinda R. Novik, Ph.D. (Michigan, 1972).

Clinical Instructor: Judith M. Roberts, M.S.N. (Vanderbilt, 1973).

HEALTH TEAMS DEVELOPMENT DIVISION

Assistant Professor: Michael A. Hamilton, M.D. (Rochester, 1964), *Chief.*

Associate Professors: Arthur C. Christakos, M.D. (South Carolina, 1955); Thomas T. Thompson, M.D. (Virginia, 1964).

Assistant Professor: Malcolm Henderson Rourk, Jr., M.D. (Pennsylvania, 1963).

Associate: John J. McQueary, B.S. (North Carolina Central, 1973).

Instructors: Leaf R. Diamant, M.Ed. (U.N.C. at Chapel Hill, 1973); Joyce Nichols, R.P.A. (Duke, 1970).

Adjunct Assistant Professor: Reginald D. Carter, Ph.D. (Bowman Gray, 1970).

Clinical Instructor: Joseph W. Kertesz, Jr., M.A. (Michigan, 1973).

Research Associate: Valerie Staple, R.P.A. (Bowman Gray, 1973).

UNIVERSITY HEALTH SERVICES DIVISION

Assistant Professor: John P. Hansen, M.D. (Wisconsin, 1969), *Chief.*

Assistant Professors: Albert D. Loro, Jr., Ph.D. (Washington U., 1976); Dorothy E. Naumann, M.D. (Syracuse, 1940); John B. Nowlin, M.D. (Duke, 1959).

Associates: Albert E. Hathaway, M.D. (Hahnemann, 1945); Franz J. Herpok, M.B.A. (Cornell, 1974); Allen J. Lester, M.D. (Otago, New Zealand, 1970); Catherine M. Severns, R.N.P. (Yale, 1971); Gregory V. Solovieff, M.D. (Duke, 1973).

Clinical Assistant Professors: Sigrid J. Nelius, M.D. (Ludwig Maximillian, Germany, 1949); Woodhall Stopford, M.D. (Harvard, 1969).

Clinical Associates: Melvin Berlin, M.D. (Duke, 1953); Susan E. Brown, M.D. (Georgetown, 1976); John W. Cromer, Jr., M.D. (Nebraska, 1972); Mary C. Hilton, M.D. (Maryland, 1974); Richard G. Joslin, M.D. (Virginia, 1974).

Research Associates: James M. Schmidt, B.H.S. (Duke, 1974); William T. Vaughan, B.S. (U.N.C. at Chapel Hill, 1972).

ADJUNCT FACULTY

Adjunct Assistant Professors: James D. Bernstein, M.H.A. (Michigan, 1968); Thomas R. Howerton, A.B. (Duke, 1946), Durham, N.C.; Josephine E. Newell, M.D. (Maryland, 1949), Raleigh, N.C.; Lawrence E. Myers, Ph.D. (California at Berkley, 1972), Research Triangle Park, N.C.; Richard J. Levine, M.D. (St. Louis, 1971), Research Triangle Park, N.C.

Adjunct Associates: Naomi Golding, M.S. (Columbia, 1970), Durham, N.C.; David P. Hunter, M.P.H. (Pittsburgh, 1970), Mount Holly, N.J.

CLINICAL FACULTY

Clinical Associate Professors: Barbara S. Hulka, M.D. (Columbia, 1959), M.P.H. (Columbia, 1961), Chapel Hill, N.C.; F.M. Simmons Patterson, M.D. (Pennsylvania, 1939), Greenville, N.C.

Clinical Assistant Professors: James C. Abel, M.D. (U.N.C. at Chapel Hill, 1966), Statesville, N.C.; Tracy E. Barber, M.D. (Temple, 1943), Lexington, N.C.; David H. Barco, M.D. (Duke, 1972), Durham, N.C.; Ellen T. Brubeck, M.D. (Ohio, 1975), Mount Olive, N.C.; Henry J. Carr, M.D. (Duke, 1954), Clinton, N.C.; Lawrence M. Cutchin, M.D. (U.N.C. at Chapel Hill, 1962), Tarboro, N.C.; Julian M. Duttera, Jr., M.D. (Duke, 1968), La Grange, Ga.; Curtis J. Eshelman, M.D. (Michigan, 1971), Durham, N.C.; Seneca T. Ferry, II, M.D. (Missouri, 1965), Sea Level, N.C.; Wilbur J. Harley, M.D. (Jefferson, 1950), Winston-Salem, N.C.; Harold R. Imbus, M.D. (Cincinnati, 1954), Greensboro, N.C.; Lyndon K. Jordan, M.D. (Duke, 1961), Smithfield, N.C.; Hervy B. Kornegay, Sr., M.D. (Bowman Gray, 1957), Mount Olive, N.C.; Robert S. Meyer, M.D. (Temple, 1974), Mount Olive, N.C.; Donald D. Neish, M.D. (Temple, 1958), Durham, N.C.; James G. Nuckolls, M.D. (Duke, 1966), Galax, Va.; Amos T. Pagter, Jr., M.D. (Duke, 1955), Tryon, N.C.; David C. Rockmore, M.D. (Med. Coll. of Virginia, 1975), Statesville, N.C.; Jesse D. Samuels, M.D. (Duke, 1967), Fayetteville, N.C.; Evelyn D. Schmidt, M.D. (Duke, 1951), Durham, N.C.; Robert H. Shackelford, M.D. (Bowman Gray, 1947), Mount Olive, N.C.; Hal M. Stuart, M.D. (Bowman Gray, 1956), Elkin, N.C.; George R. Tucker, Jr., M.D. (U.N.C. at Chapel Hill, 1955), Henderson, N.C.; W. Beverly Tucker, M.D. (U.N.C. at Chapel Hill, 1966), Henderson, N.C.; Millard W. Wester, Jr., M.D. (Duke, 1952), Henderson, N.C.; Robert F. Willis, M.D. (Med. Coll. of Virginia, 1951), Fayetteville, N.C.

Clinical Associates: Leandro C. Area, M.D. (Duke, 1975), Newton Grove, N.C.; James T. Best, M.D. (U.N.C. at Chapel Hill, 1968), Sea Level, N.C.; Helen C. Goodman, M.P.H. (U.N.C. at Chapel Hill, 1971), Sea Level, N.C.; Terrence L. Goodman, M.D. (Cornell, 1974), Sea Level, N.C.; Daniel Gottovi, M.D. (Rochester, 1965), Wilmington, N.C.; Frank W. Leak, M.D. (U.N.C. at Chapel Hill, 1967, Clinton, N.C.; Yancey G. Mebane, M.D. (Duke, 1954); James W. Mold, M.D. (Duke, 1974), Hillsborough, N.C.; John W. Nance, M.D. (Bowman Gray, 1948), Clinton, N.C.; Latham C. Peak, M.D. (Bowman Gray, 1951), Clinton, N.C.; John L. Rouse, III, M.D. (Bowman Gray, 1973), Clinton, N.C.; Philip G. Singer, M.D. (Duke, 1975), Hillsborough, N.C.; Robert H. Taylor, Pharm.D. (Tennessee at Memphis, 1977), Fayetteville, N.C.; James M. Wetter, M.D. (New York at Buffalo, 1974), Fayetteville, N.C.

COMMUNITY AND FAMILY MEDICINE RESIDENTS

Row 1 (L to R): R. Goldberg, G. Warshaw, S. Feuer, J. Dickinson, J. Hartman, J. Moore, F. Hayes, J. Bobula. **Row 2:** M. Magill, J. Fesperman, K. Munning, W. Friedman, J. Schorr, W. Blackley, A. Storeygard, W. Taylor. **Row 3:** C. de la Torre, T. Shelburne, H. Chatterton, G. Parkerson, R. Rhyne, E. Ballard, E. Pyeritz, C. Massion, A. Moore, B. Novik, A. Finn. **Row 4:** F. Hagan, M. Kane, L. Parker, D. Prentice, W. Larimore, W. Kane, B. Nash, S. Gehlbach, R. Schmitz.

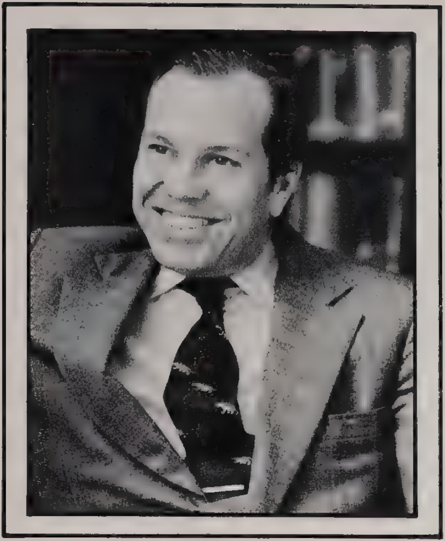
Chief Residents: Joseph C. Fesperman, M.D. (U.N.C. at Chapel Hill, 1977); Pamela H. Jessup, M.D. (Bowman Gray, 1977); Michael K. Magill, M.D. (Duke, 1977).

Residents: Melissa J. Eddy, M.D. (U.N.C. at Chapel Hill, 1979); Howard J. Eisenson, M.D. (Duke, 1979); Scott I. Feuer, M.D. (New York, Downstate Med. Center, 1977); Mary A. Goldstein, M.D. (Columbia, 1977); Eugene W. Griffin, III, M.D. (Duke, 1978); Francis E. Hayes, Jr., M.D. (Tufts, 1978); Elizabeth J. Herman, M.D. (Connecticut, 1979); Constance T. Hixson, M.D. (Utah, 1979); Peter D. Jacobi, M.D. (Case Western Reserve, 1979); Ita M. Killeen, M.D. (Maryland, 1977); Carol L. Klein, M.D. (Pittsburgh, 1979); Katherine C. Krause, M.D. (Jefferson, 1978); Walter L. Larimore, M.D. (Louisiana, 1978); Nancy H. Lewis, M.D. (Case Western Reserve, 1978); Lawrence Li, M.D. (Columbia, 1979); Charlea T. Massion, M.D. (Case Western Reserve, 1978); George H. Maxted, M.D. (Wayne State, 1977); Stephen C. McDonnell, M.D. (Miami, 1978); James L. Michener, M.D. (Harvard, 1978); Barbara A. Morris, M.D. (Rochester, 1979); Bruce D. Nash, M.D. (Albany, 1978); Patrick J. O'Connor, M.D. (Case Western Reserve, 1979); Lynn C. Parker, M.D. (Hahnemann, 1977); Eric A. Pyeritz, M.D. (Pittsburgh, 1978); Jonathan D. Quick, M.D. (Rochester, 1979); Robert L. Rhyne, M.D. (New Mexico, 1977); Robert L. Schmitz, M.D. (Washington Univ., 1978); Jessica L. Schorr, M.D. (Tufts, 1977); Colleen F. Selig, M.D. (Boston, 1977); Thomas M. Shelburne, M.D. (Duke, 1978); Alan R. Storegard, M.D. (Mayo, 1977); Sally W. Thompson, M.D. (Rutgers, 1979); Anne L. Todd, M.D. (Georgetown, 1978); Joyce A. Warren, M.D. (Rochester, 1979); Gregg A. Warshaw, M.D. (Michigan, 1976); Anne H. Wright, M.D (Duke, 1979).

Fellows: John C. Dickinson, M.D. (Columbia, 1975); Jonathan C. Hake, M.D. (Albert Einstein, 1972).

Belinda Novik, Ph.D., and first year residents

MEDICINE



James B. Wyngaarden, M.D.
Chairman

The Department of Medicine was organized in 1930 under Dr. Harold Amos, its first Chairman. He was succeeded in 1932 by Dr. Frederic M. Hanes, who served until his death in 1946. After a year during which Dr. David T. Smith, Chairman of the Department of Bacteriology, served as acting Chairman of the Department of Medicine, Dr. Eugene A. Stead was recruited to Duke from Emory University where he was Chairman of the Department of Medicine and Dean of the Medical School. Dr. Stead relinquished the chairmanship after twenty years at the age of sixty to devote himself to clinical teaching, editing, and research. The present incumbent, Dr. James B. Wyngaarden, was appointed to succeed him in 1967.

The members of the initial Department of Medicine were recruited largely from the Johns Hopkins University. Important early faculty members included Drs. Oscar Hansen-Pruss, Christopher Johnson, Elijah Menefee, William Nicholson, Edward Orgain, Elbert Persons, and Julian Ruffin. Dr. Hanes picked Dr. J. Lamar Callaway, an early graduate of Duke, to head and develop Dermatology. He also recruited Walter Kempner from Berlin to start a program in the clinical investigation of hypertension.

When Dr. Stead came in 1947, he recruited Drs. Frank Engel, John Hickam, Jack Myers, Wayne Rundles, and Jim Warren into the Department of Medicine. The existence of the Medical Private Diagnostic Clinic, with its opportunities for private practice by the faculty within Duke Hospital and a plan for sharing of income with the Department, were powerful factors in attracting Dr. Stead to Duke. He saw at Duke an opportunity to build a great Department of Medicine that could influence the future through the training of students, house staff and young faculty. During his tenure Duke achieved increasing national prominence. The Department of Medicine became known as an outstanding clinical department, a superb place in which to train and to enjoy working hard, and a locus of superior clinical investigation. Duke became pre-eminent in cardiovascular medicine as excellent programs developed in the Departments of Pediatrics, Physiology, Radiology, and Surgery as well as in Medicine. Within Medicine strong programs also developed in most of the other subspecialty areas, with Dermatology, Endocrinology, Gastroenterology, Hematology, and Pulmonary Medicine developing early, followed by Allergy and Immunology, Nephrology, Neurology, and Rheumatic and Genetic Deseases, and most recently Infectious Disease and General Medicine. The addition of the Durham Veterans Administration Hospital in 1953 offered an expansion of faculty and of teaching opportunities. Many faculty who have grown to prominence have launched their academic careers at the Durham V.A. Hospital.

The Department of Medicine exists for teaching, research and patient care. Its teaching programs operate at four levels; for students, house staff and fellows, young faculty, and practitioners. Learners are incorporated into the clinical and laboratory programs of the Department, so that intellectual growth and acquisition of practical skills occur simultaneously. Ward rounds and teaching conferences are related to contemporary patients and active research problems. The lecture mode of teaching is used sparingly except in postgraduate courses.

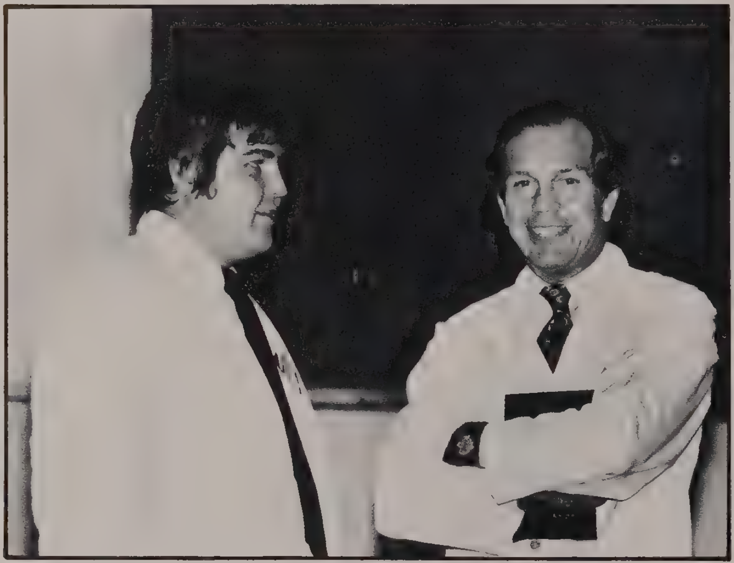
The Department is organized in eleven divisions. Each division includes faculty of diverse interests, ranging from strong clinician-teachers busily engaged in referral practices to laboratory based physician-scientists who conduct clinical or basic studies on normal cellular and system functions, disease mechanisms, new diagnostic procedures and new therapies. Among the active research themes in the Department are those in cardiovascular medicine which extend from studies of exercise conditioning and physiology, to basic studies of mechanisms of arrhythmia or of catecholamine receptors. An active theme in a number of divisions is clinical immunology, including mechanisms of immune hemolysis, of inflammation, and of cellular and humoral immunity. A third prominent theme is that of metabolic diseases, including studies of calcium and vitamin D metabolism in gout, collagen and keratin structure in dermatological disorders, and the basic metabolic defects of muscular dystrophies. Finally, the Department of Medicine participates actively in the institutional program of improved chemotherapy regimens and at the level of basic biological and immunological disturbances in this group of diseases.

L. Rubin, M. D.

Patient care and clinical teaching activities extend beyond Duke Hospital and the Durham V.A. Hospital to include participation in programs at the Durham County General Hospital, the Area Health Education Center in Fayetteville, and the continuing education program at the Cabarrus County Hospital in Concord, North Carolina.

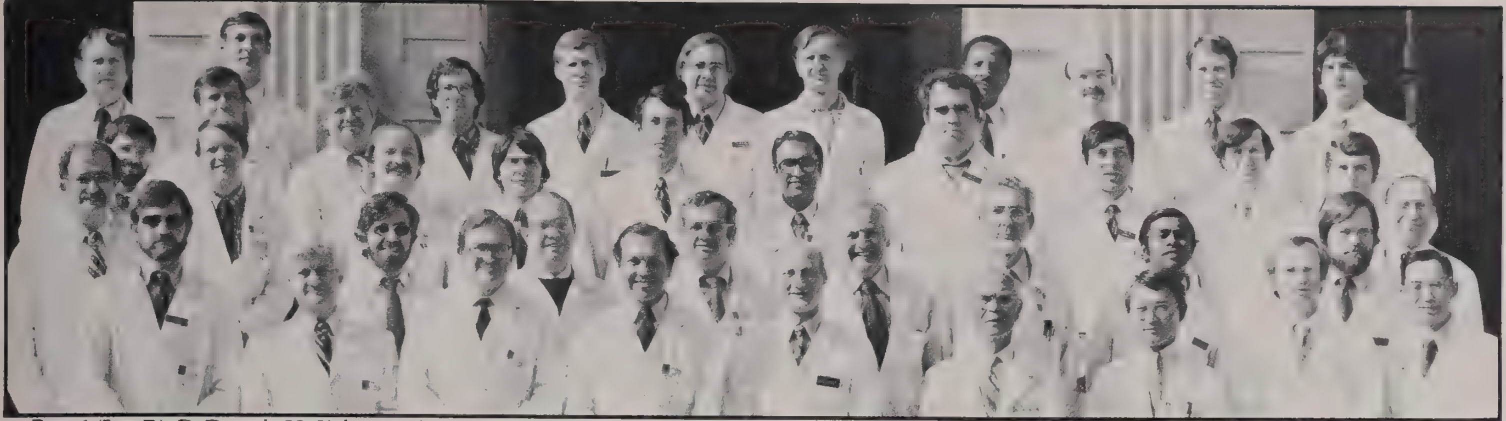
The Department of Medicine at Duke has proved itself over many decades as a good place in which to learn. The emphasis at all levels has been on the development of the individual as a competent clinician or investigator or both. Duke students compete successfully for leading internships, residencies, and fellowships in medicine throughout the country. The house staff and fellowship programs attract strong candidates from Duke and other institutions. Graduates of the medical school and house staff programs occupy positions of leadership in clinical practice and in academic institutions. A significant number of division chiefs and chairmen of departments of medicine throughout the country have had a substantial portion of their training or early careers at Duke University Medical Center.

Drs. Wendy Moeller, Rad Moeller, and Mark Moeller


R. L. Heacock, M.D., and J. B. Wyngaarden, M.D.

Drs. Harvey Cohen, Gerald Logue, and Harry Gallis

MEDICINE FACULTY



Row 1 (L to R): D. Durack, H. Sieker, J. Clapp, J. Wyngaarden, H. Cohen, L. Calloway, A. Huang, L. Lastinger, Y. Kong. **Row 2:** W. Rosse, A. Roses, E. Cox, S. Pinnell, L. Goldsmith, H. Silberman, B. Jegasothy, J. Feussner, H. Lebovitz. **Row 3:** P. Tallos, J. Moore, P. Rutledge, S. Grossman, K. Lyles, A. Soroush, J. Fay, H. Gallis, M. Feinglos, M. Drezner. **Row 4:** H. McPherson, D. Gilbert, F. Starmer, R. Waugh, H. Strauss, M. Ehrie, E. Guthrow, J. Peter, C. Johnson, G. Ellis, W. Burch, S. Pollack.

ADJUNCT FACULTY

Professors of Experimental Medicine: Pedro Cuatrecasas, M.D. (Washington, 1962); Gertrude B. Elion, D. Sc. (George Washington, 1969); George H. Hitchings, Ph.D. (Harvard, 1933); Robert A. Maxwell, Ph.D. (Princeton, 1954); Charles A. Nichol, Ph.D. (Wisconsin, 1949).

Associate Professors: David W. Barry, M.D. (Yale, 1969); Thomas Witbank, M.D. (Tufts, 1968).

Assistant Professors: Kuttikkat Chandrabose, Ph.D. (Cornell, 1970); Richard DiAugustine, Ph.D. (Tulane, 1968); Thomas E. Eling, Ph.D. (Alabama, 1968); Gary E.R. Hooks, Ph.D. (Victoria, 1968); J. Ellen Hulsingh, Ph.D. (N.C. State, 1973), Research Triangle Park; Thomas L. Wenger, M.D. (Boston U., 1971), Research Triangle Park, N.C.

Associate of Experimental Medicine: Thomas O'Neil, Ph.D. (California, 1974).

CLINICAL FACULTY

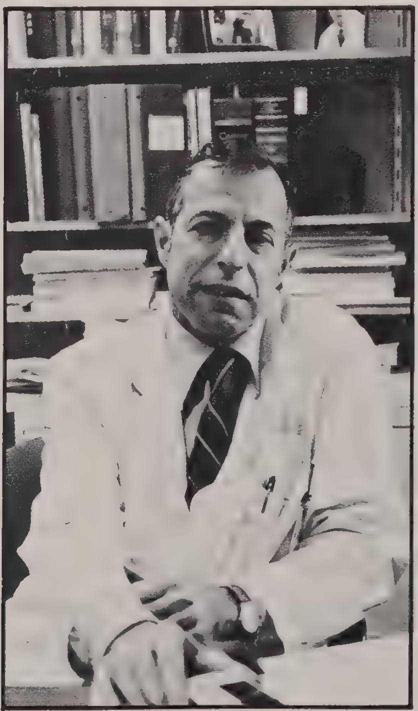
Clinical Professor: John R. Haserick, M.D. (Minnesota, 1941).

Associate Clinical Professor: Harold L. Godwin, M.D. (Harvard, 1947), Fayetteville, N.C.

Clinical Assistant Professors: Syed Ahmed, M.D. (Dow Med. Coll. 1967), Danville, Va.; Thomas M. Bashore, M.D. (Ohio State, 1972), Fairfax, Va.; Wayne D. Brenckman, M.D. (Yale, 1963), Research Triangle Park, N.C.; A. Derwin Cooper, M.D. (George Washington, 1932), Durham, N.C.; Walter E. Davis, M.D. (Duke, 1966), Durham, N.C.; Gloria F. Graham, M.D. (Bowman Gray, 1961), Wilson, N.C.; Thomas R. Harris, M.D. (Tennessee, 1955), Shelby, N.C.; William E. Howiler, M.D. (Med. U. of South Carolina, 1970), Fayetteville, N.C.; John T. Joyner, M.D. (Bowman Gray, 1962), Asheville, N.C.; John C. Lumsden, B.S. (North Carolina State U., 1947), Raleigh, N.C.; Jesse Roberts, M.D. (Louisiana, 1961), Winston-Salem, N.C.; Charles W. Styron, M.D. (Duke, 1938), Raleigh, N.C.; Abe Walston, M.D. (Duke, 1963), Durham, N.C.; Khye Weng, M.D. (U. of Malaya, 1956), Durham, N.C.; Edward S. Williams, M.D. (U.N.C. at Chapel Hill, 1954), Durham, N.C.

Clinical Associates: Sherwood W. Barefoot, M.D. (Duke, 1938), Greensboro, N.C.; Woodrow W. Batten, M.D. (Bowman Gray, 1944), Smithfield, N.C.; William R. Berry, M.D. (Duke, 1973), Raleigh, N.C.; Robert B. Bomberg, M.D. (Colorado, 1964), Durham, N.C.; Robert A. Buchanan, M.D. (Bowman Gray, 1969), Durham, N.C.; John R. Bumgarner, M.D. (Med. Coll. of Va., 1939), Raleigh, N.C.; Calvert R. Busch, M.D. (Med. Coll. of Wisconsin, 1969), Asheville, N.C.; F. Farrell Collins, M.D. (Vermont, 1972), Pinehurst, N.C.; George W. Crane, M.D. (Northwestern, 1946), Durham, N.C.; Frank P. Dalton, M.D. (Duke, 1960), Durham, N.C.; Michael S. Entmacher, M.D. (Duke, 1968), Durham, N.C.; Walter C. Fitzgerald, M.D. (Virginia, 1943), Danville, Va.; Harvey E. Grode, M.D. (Duke, 1960), Durham, N.C.; John H. Hall, M.D. (Duke, 1964), Greensboro, N.C.; Michael A. Hamilton, M.D. (Rochester, 1964), Durham, N.C.; H. LeRoy Izlar, M.D. (Duke, 1948), Durham, N.C.; George E. Koury, M.D. (Tulane, 1944), Burlington, N.C.; Stanley Levy, M.D. (Georgetown, 1971), Durham, N.C.; Thomas D. Long, M.D. (Bowman Gray, 1952), Roxboro, N.C.; Emmett S. Lupton, M.D. (New York U., 1938), Greensboro, N.C.; John A. Lusk, M.D. (Alabama, 1951), Greensboro, N.C.; Isaac H. Manning, Jr., M.D. (Harvard, 1935), Durham, N.C.; Joseph P. McCracken, M.D. (Duke, 1938), Durham, N.C.; Edmond Miller, M.D. (Duke, 1956), Durham, N.C.; W. S. Miller, M.D. (U.N.C. at Chapel Hill, 1961), Raleigh, N.C.; John A. Moore, M.D. (Med. Coll. of Virginia, 1948), Greensboro, N.C.; Henry T. Perkins, M.D. (Duke, 1957), Raleigh, N.C.; Vade G. Rhoades, M.D. (Bowman Gray, 1960), Goldsboro, N.C.; Jack G. Robbins, M.D. (Duke, 1948), Durham, N.C.; Richard J. Rosen, M.D. (George Washington, 1955), Greensboro, N.C.; Mehrdad M. Sahba, M.D. (Isfahan Faculty of Med., Iran 1957), Durham, N.C.; William V. Singletary, M.D. (Duke, 1943), Durham, N.C.; Allen D. Smith, M.D. (Georgia, 1937), Durham, N.C.; John P. Stratton, M.D. (Harvard, 1961), Durham, N.C.; W. Harrison Turner, M.D. (Med. Coll. Of Virginia, 1968), Durham, N.C.; William G. Wysor, M.D. (Virginia, 1950), Durham, N.C.

A. Huang, M.D.



J. Laszlo, M.D.

D. Boerner, M.D.

MEDICINE RESIDENTS

Row 1 (L to R): B. Hettleman, N. Werdiger, D. McCann, M. Catapano, R. Siegel, N. Allen, R. Heacock, D. Boerner, M. Sullivan, W. Silverman, P. Jones, C. Bocaccino, L. Smiley, T. Brown. **Row 2:** E. Wright, A. Bragdon, G. Cascino, C. Burton, E. Sadler, G. Spencer, A. Keller, M. Zachek, W. Moeller, D. Dunbar, J. McFarland, F. Hejtmancik, W. Cunningham. **Row 3:** D. Howley, D. Sellers, R. Shalom, C. Hixson, B. Goodwin, J. Batlle, A. Brantley, R. Jackson. **Row 4:** D. Merrell, M. Michels, D. Thiele, W. Keitel, R. Moorman, S. McCachren, C. Shin, T. Reichert, D. Grierson, R. Huck, J. Deterding, P. Fox, R. McCabe. **Row 5:** P. Heald, L. Townsend, G. Gabliani, A. Littman, J. Fedor, G. Shulman, S. Studenski, A. Nussbaum, A. Nielsen, J. Medoff. **Row 6:** J. Sosnowchik, E. Brinton, D. Cook, D. Pryor, D. Hamilos, M. Conley, M. Currie, J. Pickard, W. Ruth, M. Ruffin, A. Powers, R. Moeller, J. Trantham, D. Shimm, J. Humeniuk, W. Newman.

Chief Residents: David A. Boerner, M.D. (Pennsylvania State, 1976); Robert L. Heacock, M.D. (Ohio State, 1976).

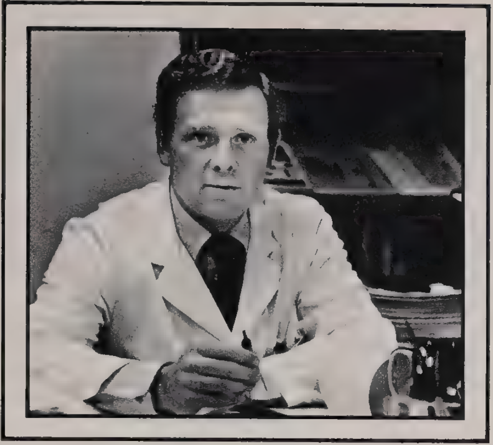
Senior Residents: J. Trig Brown, M.D. (Washington State, St. Louis, 1977); Martin J. Conley, M.D. (Duke, 1973); Timothy C. Evans, M.D. (Michigan, 1974); John M. Fedor, M.D. (Duke, 1976); Bonnie J. Goodwin, M.D. (Dartmouth, 1977); Bruce D. Hettleman, M.D. (Harvard, 1977); Wendy A. Keitel, M.D. (Duke, 1977); Stephen K. Lucas, M.D. (Harvard, 1977); Robert E. McCabe, M.D. (Harvard, 1976); Janice G. McFarland, M.D. (Oregon, 1977); Jeffrey R. Medoff, M.D. (N.Y. Medical Center, 1977); G. Radford Moeller, M.D. (Duke, 1977); Wendy P. Moeller, M.D. (Duke, 1977); Alan I. Nussbaum, M.D. (Harvard, 1977); Lonard C. Rigsby, M.D. (Alabama, 1977); W. Neal Roberts, M.D. (Virginia, 1977); John F. Ryan, M.D. (Brooklyn, 1977); Michael A. Salvatore, M.D. (Arizona, 1977); John K. Sanstead, M.D. (Duke, 1976); T. Duncan Sellers, M.D. (Duke, 1977); Cheolsu Shin, M.D. (Alabama, 1977); Robert S. Siegel, M.D. (George Washington, 1977); Stephen M. Teague, M.D. (Illinois, 1977); Dwain L. Thiele, M.D. (Baylor, 1977); Lloyd Townsend, M.D. (Case Western Reserve, 1977); Joey L. Trantham, M.D. (Duke, 1976); Michael J. Zachek, M.D. (Georgetown, 1977).

Junior Residents: Nancy B. Allen, M.D. (Tufts, 1978); Joseph J. Billadello, M.D. (Georgetown, 1978); David R. Bishop, M.D. (Michigan, 1978); William A. Bornstein, M.D. (Med. Coll. of Georgia, 1976); Dale E. Bredesen, M.D. (Duke, 1977); Eliot A. Brinton, M.D. (Utah, 1978); Gary V. Burton, M.D. (Utah, 1978); Joseph Y. Cheung, M.D. (Duke, 1978); Mark S. Currie, M.D. (Southwestern, 1978); David J. Dunbar, M.D. (Ohio, 1978); David S. Grierson, M.D. (Ohio, 1978); James J. Hines,M.D. (Northwestern, 1978); Robert L. Huck, M.D. (Washington U., St. Louis, 1978); Phillip E. Jones, M.D. (Emory, 1978); William B. Lide, M.D. (Johns Hopkins, 1978); Jeffrey L. Mathews, M.D. (Utah, 1978); Albert B. Mercer, M.D. (Louisville, 1978); Dale E. Merell, M.D. (Pennsylvania, 1978); Mary L. Michels, M.D. (Ohio, 1978); J. Randall Moorman, M.D. (Mississippi, 1978); Allyn K. Nakashima, M.D. (Utah, 1978); William N. Newman, M.D. (Duke, 1977); Anton P. Nielson, M.D. (Duke, 1977); Jeb S. Pickard, M.D. (Louisville, 1978); Thomas A. Reichert, M.D. (Miami, 1978); Steven F. Roark, M.D. (Duke, 1978); Marshall De G. Ruffin, M.D. (Harvard, 1978); Guadalupe Sanchez, M.D. (Harvard, 1978); Rose Shalom, M.D. (Harvard, 1978); David S. Shimm, M.D. (Duke, 1977); Warren Silverman, M.D. (Albany, 1978); M. Lynn Smiley, M.D. (Duke, 1978); James Sosnowchik, M.D. (Ohio, 1978); Eugene E. Wright, M.D. (Duke, 1978); Ruth T. Young, M.D. (Tennessee, 1977).

Interns: Stephen H. Bandeian, M.D. (Harvard, 1978); Juan F. Batlle, M.D. (Duke, 1979); Caral A. Bocaccino, M.D. (Brown, 1979); B. Alton Brantley, M.D. (Duke, 1978); Claude S. Burton, M.D. (Duke, 1979); Gregory D. Cascino, M.D. (Rush, 1979); Michael S. Catapano, M.D. (Georgetown, 1979); Darryl B. Cook, M.D. (Utah, 1979); William F. Cunningham, M.D. (Utah, 1979); Leslie J. Curfman, M.D. (Pennsylvania, 1979); James L. Deterding, M.D. (Nebraska, 1979); Peter T. Fox, M.D. (Georgetown, 1979); Gregory I. Gabliani, M.D. (Illinois, 1979); Daniel L. Hamilos, M.D. (Northwestern, 1979); Peter W. Heald, M.D. (Duke, 1978); J. Fielding Hejtmancik, M.D. (Baylor, 1979); Clair S. Hixson, M.D. (Utah, 1979); Daniel J. Howley, M.D. (Temple, 1979); Joseph A. Jabaily, M.D. (Case Western Reserve, 1979); Andrew M. Keller, M.D. (Ohio, 1979); Andrew B. Littman, M.D. (Emory, 1979); S. Spence McCachren, M.D. (Duke, 1978); Dennis R. McCann, M.D. (Dartmouth, 1979); James E. Nordstrom, M.D. (Duke, 1979); Robert W. Paterson, M.D. (Duke, 1979); Alvin C. Powers, M.D. (Tennessee, 1979); Albert A. Ramage, M.D. (Vanderbilt, 1979); Wayne K. Ruth, M.D. (Duke, 1978); J. Evan Sadler, M.D. (Duke, 1979); David M. Schlossman, M.D. (Duke, 1979); Gerald I. Shulman, M.D. (Wayne State, 1979); Susan P. Smith, M.D. (California, San Diego, 1979); Gerald D. Spencer, M.D. (Washington, Seattle, 1979); Stephanie A. Studenski, M.D. (Kansas, 1979); Michael J. Sullivan, M.D. (Mt. Sinai, 1979); Arthur Tordini, M.D. (Rutgers, 1979).

Fellows: Carroll D. Arnett, Ph.D. (Maryland, 1976); Edward Baptist, Ph.D. (M.I.T., 1973); Dean A. Bramlet, M.D. (Univ. of Illinois, 1976); Gene H. Burke, M.D. (Virginia, 1975); Mary C. Byrne, Ph.D. (Temple, 1977); John R. Cohn, M.D. (Jefferson, 1976); Eric H. Conn, M.D. (Duke, 1976); G. Ralph Corey, M.D. (Baylor, 1973); Jeffrey Crawford, M.D. (Ohio, 1974); Keith Crutcher, Ph.D. (Ohio State, 1977); Carmine Dalto, M.D. (New York Univ., 1976); William G. Danneman, M.D. (Ohio State, 1976); Albert O. Davies, M.D. (Utah, 1975); Dwight Davis, M.D. (Rochester, 1975); Mark Dellasega, M.D. (Kansas, 1976); Michael C. Dillon, M.D. (Kentucky, 1975); Philip H. Dunn, M.D. (Duke, 1976); Mark B. Edelstein, M.D. (Washington Univ., 1975); Emma Fernandez- Repollet, Ph.D. (Univ. of Puerto Rico, 1979); Bruce A. Freeman, Ph.D. (California, 1978); Charles E. Garrett, Ph.D. (Univ. of California, 1979); Leland E. Garrett, M.D. (Med. Univ. of S.C., 1976); Leon W. Geary, M.D. (Texas Tech., 1975); Deborah C. German, M.D. (Harvard, 1976); Lawrence D. German, M.D. (Boston, 1976); Raymond J. Gibbons, M.D. (Harvard, 1976); Joel F. Ginsberg, M.D. (Georgia, 1975); Hernan D. Giraldo, M.D. (Univ. of Antioquia, 1971); William Gough, M.D. (Rochester, 1976); Augustus O. Grant, M.D. (Univ. of Edinburgh, 1971); David D. Grove, M.D. (Chicago, 1970); Thomas Guarnieri, M.D. (John Hopkins, 1975); Stephen C. Hammill, M.D. (Colorado, 1974); Michael Hamrell, Ph.D. (Univ. of Sydney, 1973); Franklin Handel, M.D. (Univ. of Pennsylvania, 1976); Robert L. Harrison, M.D. (Univ. of Texas, Galveston, 1976); Gholamhossain Hayatdavoudi, M.D. (Pahlavi Med. School, 1971); David A. Hester, M.D. (Oklahoma, 1973); Michael K. Hise, M.D. (Univ. of Michigan, 1974); Brian Hoffman, M.D. (McGill, 1975); Norman Hudson, M.D. (Univ. of Illnois, 1975); Wu Yen Hung, Ph.D. (Mississippi, 1972); John D. Hunter, M.D. (Duke, 1976); Mitsuo Itakura, M.D. (Univ. of Tokyo, 1973); Richard A. Jackson, M.D. (Ohio, 1976); Joseph K. Keener, M.D. (St. Louis, 1975); Richard S. Kent, M.D. (California, 1975); Charles R. Kerr. M.D. (Univ. of British Columbia, 1973); Robert B. Kirkpatrick, M.D. (Washington Univ., 1974); Paul E. Klotman, M.D. (Indiana, 1976); Russell Lane, M.D. (Univ. of Newcastle, 1973); Real Lebeau, M.D. (Montreal, 1974); Jeanne L. Lesiewicz, Ph.D. (Delaware, 1975); Mark Levine, M.D. (McGill, 1976); Kristine M. Lohr, M.D. (Rochester, 1975); Cheryl Mahony, M.D. (Duke, 1976); Arthur E. Mays, M.D. (S.U.N.Y.-Buffalo, 1976); Gale McCarty, M.D. (Duke, 1974); John W. McKeown, M.D. (Tennessee, 1973); David S. Mendelson, M.D. (Ohio State, 1973); Barbara A. Miller, M.D. (Pennsylvania State, 1967); Mark B. Moeller, M.D. (Dartmouth, 1977); Richard E. Moon, M.D. (McGill, 1973); Joseph J. Muscato, M.D. (Pennsylvania, 1975); Mary S. Muscato, M.D. (Pennsylvania, 1975); W. Joseph Newman, M.D. (Duke, 1975); Edward Olender, Ph.D. (S.U.N.Y.-Syracuse, 1979); Stuart H. Packer, M.D. (S.U.N.Y.-Downstate Med. Ctr., 1974); Sebastian T. Palmeri, M.D. (Georgetown, 1975); Frank S. Pancotto, M.D. (Chicago, 1975); Charles J. Parker, M.D. (U.N.C., 1975); John R. Perfect, M.D. (Med. Coll. of Ohio, 1975); Kathryn A. Peroutka, M.D. (Maryland, 1975); David B. Pryor, M.D. (University of Michigan, 1976); Steven Port, M.D. (Mt. Sinai, 1972); Frederick Radoff, M.D. (N.J. Coll. of Med., 1976); Nelson Rassi, M.D. (Univ. of Goias, 1974); Richard A. Reinhart, M.D. (Ohio, 1971); Michael J. Reiter, M.D. (S.U.N.Y.-Stony Brook, 1972); Tracey A. Rouault, M.D. (Duke, 1977); Thomas J. Santoro, M.D. (New York Univ., 1976); Douglas D. Schocken, M.D. (Duke, 1973); David A. Slosky, M.D. (Colorado, 1976); Warren M. Smith, M.D. (Univ. of Otago, 1968); Wilson P. Smith, M.D. (West Virginia, 1976); Alan Spanos, M.D. (Magdalene Coll., 1973); Yogambal Srinivasan, Ph.D. (Indiana Inst. of Sci., 1977); Richard S. Stack, M.D. (Wayne State, 1976); Jeffrey Stadel, Ph.D. (Pennsylvania, 1977); Christopher Stephens, M.D. (Southwestern, 1976); Gary L. Stiles, M.D. (Vanderbilt, 1975); Judith L. Swain, M.D. (California at San Diego, 1974); Michael D. Tharp, M.D. (Ohio State,z; Nguyen D. Thieu, M.D. (Howard, 1975); Charles W. Tomlinson, M.D. (Univ. of Manitoba, 1976); Maury K. Topolosky, M.D. (Ohio, 1976); Christopher D. Truss, M.D. (Alabama, 1976); Mark Upton, M.D. (McGill, 1973); Jeffrey Vance, Ph.D. (Indiana, 1979); Steven L. Vest, M.D. (Minnesota, 1974); Henry Ryan Wagner, Ph.D. (New Mexico, 1975); Richard Wertz, Ph.D. (Univ. of Tennessee, 1978); Richard Whitesell, Ph.D. (Vanderbilt, 1978); Bret C. Williams, M.D. (Kansas, 1976); N. Kent Wise, M.D. (Illinois, 1973); Larry Yamaoka, Ph.D. (Univ. of Oregon, 1972).

CARDIOLOGY



Andrew G. Wallace, M.D.
Chief

The subspecialty service of cardiovascular disease has been represented in the Department of Medicine since the medical school was founded in 1930. The Cardiology Division of the Department of Medicine was organized by Dr. Eugene A. Stead in 1967. Dr. Henry D. McIntosh was director of the Cardiovascular Laboratory, and Dr. Edward S. Orgain was director of the Cardiovascular Disease Service. Dr. McIntosh departed in 1969 to become chairman of the Department of Medicine at Baylor University, and Dr. Andrew G. Wallace was named Chief of the Division of Cardiology. Dr. Wallace, a former Markle scholar, was named to the Walter Kempner Professorship in 1973. Dr. Robert E. Whalen replaced Dr. Orgain when he retired as director of the Cardiovascular Disease Service in 1975. Dr. Orgain has received the Distinguished Service Award from the American Heart Association and the Gifted Teacher Award from the American College of Cardiology.

Today the Division of Cardiology supports large programs in basic and clinical research, teaching, and treatment of cardiovascular disease. Basic research has grown significantly in recent years. Important research efforts in cardiac metabolism and thrombosis have joined traditionally strong laboratories for research in coronary blood flow, mechanics of myocardial contraction, and cardiac electrophysiology. Dr. Robert J. Lefkowitz received the Young Scientist Award from the Passano Foundation in 1978 for his studies in cardiac receptor function, and Dr. R. Sanders Williams in his laboratory was the second Duke fellow to receive the Young Investigator Research Award from the A.C.C. (The first was Dr. Yi-Hong Kong in 1970.)

Clinical research is another aspect of the Division. Laboratories studying epidemiology, electrophysiology, radionuclide imaging, and cardiac ultrasound are making important contributions to those areas. The expanding field of cardiac rehabilitation, directed by Dr. Wallace, has opened new areas of clinical investigation in coronary artery disease and exercise physiology.

The teaching function of the Division is shared by the entire staff. Drs. Robert A. Waugh and James J. Morris have been named Teaching Scholars of the A.H.A. Other members of the Division have received the Golden Apple Teaching Award and the new Thomas B. Kinney Award (to Dr. Robert H. Peter in 1979) from the medical students for outstanding contributions to teaching.

Treatment of cardiovascular disease at Duke is provided through the Private Diagnostic Clinic and the Medical Outpatient Clinic. Many patients with arrhythmias or coronary artery disease receive special treatment on the Clinical Research Unit or in DUPAC (Duke University Preventive Approach to Cardiology. The Durham Veterans Administration Hospital has its own cardiology staff, all of whom have faculty appointments in the Department of Medicine at Duke University. Dr. Joseph C. Greenfield is Chief of Cardiology at the V.A. Hospital.

Many members of the Division have made special contributions in other areas. The editorial offices of the journal *Circulation* were located at Duke between 1973 and 1978 while Dr. Stead was editor and Drs. Victor S. Behar, Patrick A. McKee, and Harold C. Strauss were associate editors. Former members of the Division, Dr. James V. Warren and Dr. McIntosh, have served respectively as presidents of the A.H.A. and the A.C.C. and, like many former faculty members, have become directors of other divisions or departments of medicine. Continuing evolution of this type assures a constant infusion of fresh ideas and talent into the Division.

Professor: Andrew G. Wallace, M.D. (Duke, 1959), *Chief.*

Professors: Walter L. Floyd, M.D. (John Hopkins, 1954); Joseph C. Greenfield, M.D. (Emory, 1956); Robert J. Lebkowitz, M.D. (Columbia, 1966); James J. Morris, M.D. (State U. of N.Y., 1959); Eugene A. Stead, Jr., M.D. (Emory, 1932); Robert E. Whalen, M.D. (Cornell, 1956).

Associate Professors: Victor S. Behar, M.D. (Duke, 1961); Fred R. Cobb, M.D. (Mississippi, 1964); John J. Gallagher, M.D. (Georgetown, 1968); Joseph R. Kisslo, M.D. (Hahnemann, 1967); Yihong Kong, M.D. (Natl. Defense Med. Center, Taiwan, 1958); Robert H. Peter, M.D. (Duke, 1961); Robert A. Rosati, M.D. (Duke, 1967); C. Frank Starmer, Ph.D. (U.N.C. at Chapel Hill, 1968); Harold C. Strauss, M.D. (McGill, 1964); Galen S. Wagner, M.D. (Duke, 1965).

Assistant Professors: John T. Baker, M.D. (Harvard, 1971); Barbara C. Newborg, M.D. (John Hopkins, 1949); Edward Pritchett, M.D. (Ohio, 1971); Olaf Von Ramm, Ph.D. (Duke, 1973); Ali Soroush, M.D. (U. of Isfahan, 1956); Robert Waugh, M.D. (Pennsylvania, 1966).

Associates: Michael Hindman, M.D. (Illinois, 1973); Kenneth G. Morris, M.D. (Ohio, 1972); Ralph M. Scallion, M.D. (Case Western, 1975); Nancy W. Stead, M.D. (Duke, 1969); Judith L. Swain, M.D. (U. of Calif., San Diego, 1974); R. Sanders Williams, M.D. (Duke, 1974).

Assistant Medical Research Professors: Marc G. Caron, Ph.D. (Miami, 1973); Larry J. Fretto, Ph.D. (U.C.L.A., 1972); Philip McHale, Ph.D. (Duke, 1972); Judith C. Rembert, Ph.D. (U.N.C. at Chapel Hill, 1972); Phillip A. Routledge, M.D. (U. of Newcastle, 1978); William M. Smith, Ph.D. (Duke, 1970); Thomas R. Snow, Ph.D. (Duke, 1971).

Row 1 (L to R); F. Starmer, J. Kisslo, W. Floyd, R. Whalen, Y. Kong, A. Wallace. **Row 2:** E. Pritchett, J. Morris, V. Behar, M. Hindman, F. Cobb. **Row 3:** W. Smith, H. Strauss, R. Peter, R. Ideker, J. Baker, R. Waugh.

DERMATOLOGY

Gerald S. Lazarus, M.D.
Chief

The Division of Dermatology, Department of Medicine at Duke University Medical Center was established by Dr. J. Lamar Callaway in 1939. Dr. Callaway was Chief until 1975 when he was succeeded by Dr. Gerald S. Lazarus. Over the years the Duke program has trained more than ninety dermatologists, many of whom have risen to prominance as chairmen of dermatology programs, as academicians, and as clinicians. Dr. Callaway's unique contributions to Duke and the Division of Dermatology were recently recognized by the endowment of the J. Lamar Callaway Chair of Dermatology at Duke. This was made possible by the collection of over $250,000 from Dr. Callaway's former trainees, patients and friends. Dr. Lazarus was named the first incumbant of the Callaway Chair in July, 1978.

The Division of Dermatology has an extremely active clinical service. Dermatology clinics see over twenty thousand outpatients per year. It is responsible for the care of over one thousand inpatients per year with severe disabling dermatological diseases. Unique and specialized forms of dermatological therapy are provided, including Psoralen and Ultra-violet light therapy for psoriasis, chemosurgery, and pediatric dermatology.

The Division of Dermatology is totally committed to medical education. There are nine dermatology residents and one dermatopathology fellow. For medical students the Division offers a full-time four week rotation as well as an eight week lecture course. It also provides educational experiences for Medical and Family Practice House Staff and Physician's Associates.

The research program of the Division of Dermatology has grown dramatically. There are four full-time senior dermatologist investigators and ten Ph.D. or M.D. research fellows and associates. The Duke Dermatology research labs have been extremely productive and have published over one hundred papers in outstanding journals in the past four years. The Division of Dermatology has also been awarded a National Institutes of Health Training Grant which provides support for Dermatology research fellows. The spectrum of research interests are extremely broad. Dr. Gerald Lazarus is investigating mechanisms of inflammation in dermatological disease with special reference to psoriasis and pemphigus. Dr. Lowell Goldsmith has been intensively studying ichthyosis, disorders of keratinization and epithelial differentiation. Dr. Sheldon Pinnell leads an active program which is studying connective tissue biosynthesis, hereditary disorders of connective tissue and collagen metabolism. Dr. Brian Jegasothy is evaluating mechanisms of immune suppression in immune diseases and cancer. Dr. Robert Gilgor is evaluating new pharmacological therapies for psoriasis and vasculitis. Dr. Sheldon Pollack is investigating the epidemiology and biological behavior of skin cancers. The Division of Dermatology at Duke has capitalized on its heritage of excellence to address the challenges of excellence in patient care, education and research.

Professor: Gerald S. Lazarus, M.D. (George Washington, 1963), *Chief.*

Professors: J. Lamar Callaway, M.D. (Duke, 1932); Lowell A. Goldsmith, M.D. (State U. of New York, 1963); Sheldon R. Pinnell, M.D. (Yale, 1963).

Assistant Professors: Robert S. Gilgor, M.D. (Pennsylvania, 1962); Brian V. Jegasothy, M.D (U. of Ceylon, 1966); Sheldon V. Pollack, M.D. (U. of Toronto, 1974).

Medical Research Associates: Kenneth A. Lindberg, Ph.D. (U. of Pittsburgh, 1970); Saood Murad, Ph.D. (U. of Calif., Davis, 1978); Kay H. Singer, Ph.D. (Duke, 1977).

Residents: Alexander Chiarmonti, M.D. (Michigan, 1976); Madelein Duvic, M.D. (Duke, 1977); John M. Humeniuk, M.D. (Univ. of Manitoba, 1977); Robert B. Johnson, M.D. (Duke, 1978); Patricia A. Marchase, M.D. (Cornell, 1977); John C. Murray, M.D. (Duke, 1977); Elizabeth F. Sherertz, M.D. (Univ. of Virginia, 1978); James W. Trimble, M.D. (Florida, 1977); A. Elise Weinrich, M.D. (Med. Univ. of S.C., 1978).

P. A. Marchase, M.D., A. Chiaramonti, M.D., and G. S. Lazarus, M.D.

Row 1 (L to R): L. Callaway, G. Lazarus, L. Goldsmith. **Row 2:** S. Pollack, B. Jegasothy, S. Pinnell, R. Gilgor.

ENDOCRINE

Professor: Harold E. Lebovitz, M.D. (Duke, 1948), *Chief.*
Professor: Harry T. McPherson, M.D. (Duke, 1948).
Associate Professors: Jerome M. Feldman, M.D. (Northwestern, 1961); Charles Johnson, M.D. (Howard, 1963).
Assistant Professors: Marc K. Drezner, M.D. (Pittsburgh, 1970); George S. Eisenbarth, M.D. (Duke, 1974); Kenneth S. McCarty, Jr., M.D. (Duke, 1972).
Associates: B. Titus Allen, M.D. (Duke, 1966); Warner M. Burch, M.D. (Bowman Gray, 1971); Mark Feinglos, M.D. (McGill, 1973); C. Earl Guthrow, M.D. (U. of Pa., 1969); David A. Hester, M.D. (Oklahoma, 1973); Kenneth W. Lyles, M.D. (Med. Coll. of Va., 1974).

Harold E. Lebovitz, M.D.
Chief

The current Endocrine Division arose as an integration of the original Division of Metabolism, which was organized by Dr. William Nicholson in the late 1930's, and the Division of Endocrinology, which was organized in the early 1950's by Dr. Frank L. Engel. Dr. Nicholson pioneered the use of radioactive iodine in the diagnosis and treatment of thyroid disease in the Southeast, and Dr. Engel was internationally known for his work on the clinical use and metabolic effects of ACTH. During its earlier years the Division's major contributions were in the area of metabolic regulation.

The current Division comprises twelve faculty members, and the present activities of the Division extend into many areas of endocrinology. Major research efforts currently center around: (1) various aspects of diabetes mellitus, including the control of insulin secretion and insulin action, the mechanism of action of sulfonylureas, the relationship of alterations in cell surface molecules to the development of insulin-dependent diabetes and the nature and significance of glycosylated proteins in hyperglycemic states; (2) normal physiology and pathophysiology of Vitamin D metabolism and its relationship to metabolic bone disorders; (3) the use of bone histomorphology to elucidate abnormal physiology; (4) hormonal regulation of cartilage metabolism and differentiation; (5) the significance of alterations in intracellular and extracellular biogenic monoamines on normal physiology and disease states; (6) the genetic and immunologic aspects of polyglandular failure and related diseases.

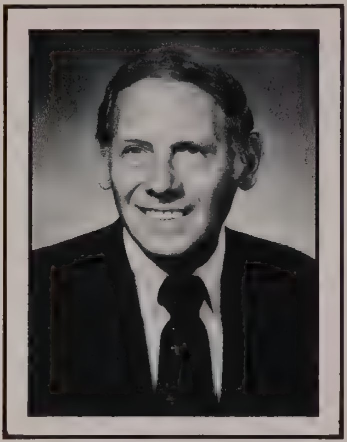
The Division has had a very active student and post-doctoral training program, and our former trainees are currently Directors of Departments or Endocrine Divisions, active independent investigators, and teachers or well recognized specialists in their communities.

K. S. McCarty, Jr., M.D.

D. A. Hester, M.D., and G. R. Corey, M.D.

(L to R): C. Johnson, K. Lyles, D. Hester, M. Feinglos, E. Guthrow, H. Lebovitz, R. Jackson, H. McPherson, M. Drezner, J. Ellis, W. Burch.

GASTROENTEROLOGY



Malcolm P. Tyor, M.D.
Chief

Julian M. Ruffin, M.D. was (himself) the Division of Gastroenterology for the first twenty-five years. He taught students and housestaff on the wards and in the clinics, cared for patients in the Medical Private Diagnostic Clinic, gathered clinical data, published two volumes of significant observations, directed the Medical Outpatient Clinic, and played guitar when in the company of old friends and suitable refreshment.

At the time of Dr. Ruffin's retirement in 1965, the Division had "swollen" to three faculty members, and at the end of the second twenty five years, it required eleven faculty to continue what one man had done for the first quarter century.

Dr. Malcolm P. Tyor was the first addition to the faculty. He returned to Duke in 1955 to develop the GI program at the Durham Veterans Administration Hospital and to begin the tradition of laboratory research within the Division. In 1959, he was joined by Dr. Edward L. Owen, who remained at the V.A. Hospital when Dr. Tyor moved to Duke Hospital in 1961. Subsequent additions to the faculty, Drs. Paul D. Webster and William O. Dobbins, III, began distinguished careers at the Durham V.A. Hospital and then moved on to faculty positions at Georgetown University and the Medical College of Georgia. In 1966, Dr. David L. Young joined the faculty as the first Hepathologist at Duke Medical Center. He was in charge of a rapidly developing Liver Service until his untimely death in 1972.

In 1967 Dr. Young and Dr. Tyor were joined by Dr. Michael E. McLeod, who became the first full-time clinician-teacher in the Division. He was joined by Dr. John T. Garbutt, Jr., in 1973. Together with Dr. Jacquelin Hijmans, Drs. Garbutt and McLeod constitute the main elements of the clinical leg of the three-legged stool, which also includes patient care through the Private Diagnostic Clinic and active clinical teaching.

The GI program continued to flourish and expand at the V.A. Hospital, and in 1967, Dr. Steven H. Quarfordt was recruited from the National Institutes of Health to establish the Cooperative Lipid Laboratory at the V.A. Hospital and to take charge of the Hepatology program there. Three years later, following Dr. Dobbins' departure, Dr. Charles M. Mansbach, III, became Chief of the GI Service at the V.A. Hospital.

The seventies saw an unprecedented expansion of the Division. Dr. Paul G. Killenberg joined the Division in 1972, and Dr. Robert L. Stevens assumed responsibility for the Clinical Laboratory in 1973. Dr. Thomas T. Long joined the faculty in 1976 in a unique role as the first faculty member to be in charge of a teaching program at an outlying community hospital. Currently, Dr. Long continues in an active role as consultant in gastroenterology to Cabarrus Memorial Hospital in Concord, North Carolina, and maintains active participation in the training and clinical epidemiology programs of the Division.

In the last half of the seventies, Drs. James K. Roche, Lowrie R. Glasgow, and Stuart F. Robinson joined the Division upon completion of a Research Training Fellowship in the Division. Drs. Roche and Glasgow were the first members of the Division to support research laboratories outside the Hospital proper — an important metastasis to the Jones Building.

Basic research into the pathophysiology of gastrointestinal disease has been the unifying concept under which the most recent expansion has occurred. Currently, the potential for translation of research to clinical problems is even more exciting. In 1980, Dr. Frank S. Pancotto will join the Division as a clinical epidemiologist and provide yet another link between the bench and the P.D.C.

As it begins the next fifty years, the Division looks ahead to the development of the Gastroenterology unit on the sixth floor of Duke North. This will provide a single area of concentration for most of our patients and will enable improvements in the level of care as well as the possibility for further innovations in the translation of new information to patient care.

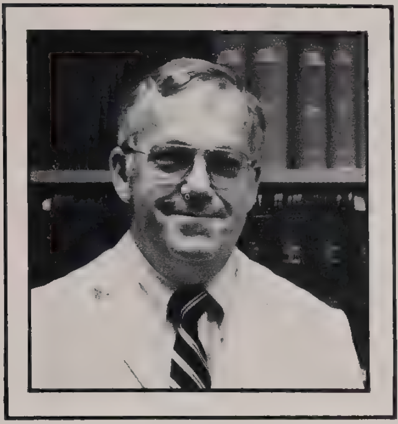
Professor: Malcolm P. Tyor, M.D. (Duke, 1946), *Chief.*

Associate Professors: John T. Garbutt, M.D. (Temple, 1962); Charles M. Mansbach, M.D. (New York U., 1963); Michael E. McLeod, M.D. (Duke, 1960); Steven H. Quarfordt, M.D. (New York U., 1960).

Assistant Professors: Jacqueline C. Hijmans, M.D. (U. of Leiden, 1951); Paul G. Killenberg, M.D. (Pennsylvania, 1963); Thomas T. Long, M.D. (Bowman Gray, 1966); James K. Roche, M.D. (Pennsylvania, 1969). **Associates:** Lowrie R. Glasgow, M.D. (Virginia, 1969); Stuart F. Robinson, M.D. (Duke, 1973).

Row 1 (L to R): J. Roche, N. Thieu, J. Medoff, M. Tyor, J. Garbutt, R. Stevens, C. Mansbach, II. **Row 2:** T. Long, L. Glasgow, F. Pancotto, C. Truss, S. Vest, M. McLeod, P. Killenberg.

GENERAL MEDICINE



Patrick A. McKee, M.D.
Chief

The Division of General Medicine, organized in October, 1976, is the newest division in the Department of Medicine. Dr. Patrick McKee is the first Chief of this new division. It was begun by a group of faculty who shared common interests and a dedication to general internal medicine. The major goal of these faculty is to engender an attitude that makes students and housestaff want to remain knowledgeable in all areas of internal medicine and to use that talent for developing comprehensive approaches to patients and their problems. The Division emphasizes medical education in ambulatory and primary patient care. One of its responsibilities is the operation of the Medical Outpatient Clinic. As a group, the Division of General Medicine faculty assume about one-half of the teaching on Strudwick Ward and in addition provide faculty teaching for the general medical ward rotation at Durham County General Hospital.

It is the intent of this Division to maintain a scholarly thrust consonant with the goals and spirit of a university dedicated to teaching and advancement of knowledge. Therefore, a general medical research program is presently being refined with the intent of developing physician-clinical scholars. Research areas include clinical epidemiologic studies of such disorders as hypertension, diabetes mellitus and alcoholism; studies of physician-patient interactions; cost-containment approaches to medical care; and drug testing research. Other research areas will be developed in the future, some of which will interface with the interests of subspecialty divisions.

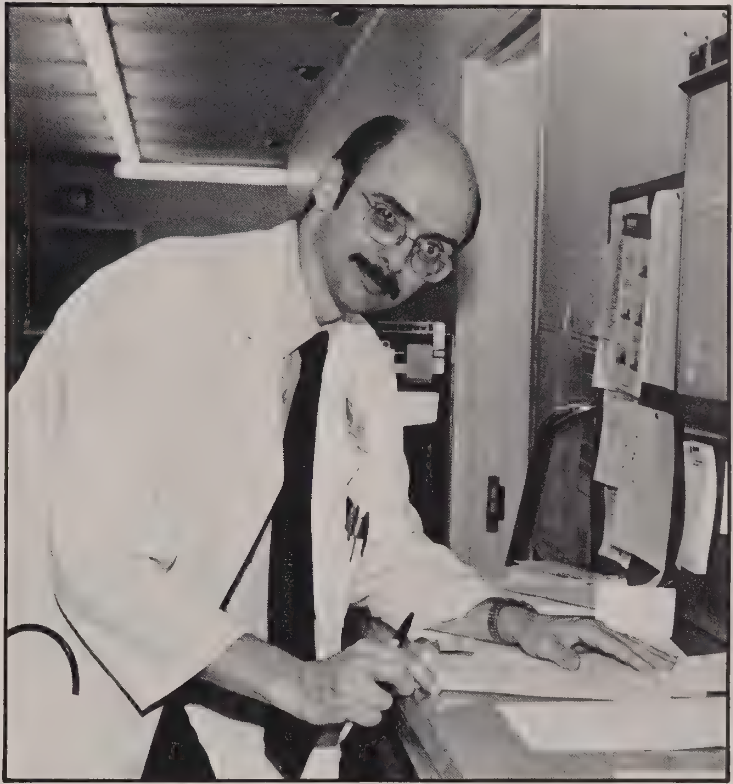
The precise definition of a "general internist" remains unclear in the minds of many, especially since every subspecialist is initially trained as an internist. We have concluded that general internal medicine is perhaps best defined as an "attitude" which motivates a physician to maintain a broad base of knowledge which he can skillfully integrate in caring for people and their illnesses.

Professor: Patrick A. McKee, M.D. (Oklahoma, 1962), *Chief.*

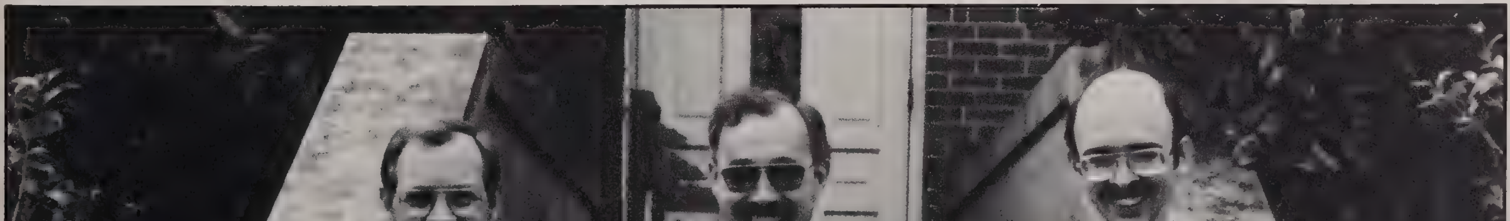
Associate Professor: George J. Ellis, M.D. (Harvard, 1963); Frank Lecocq, M.D. (Illinois, 1954); Francis Neelon, M.D. (Harvard, 1962).

Assistant Professors: David B. Gilbert, M.D. (Colorada, 1965); Ramon Velez, M.D. (New York U., 1970).

Associates: John R. Feussner, M.D. (Vermont, 1973); Eugene Linfors, M.D. (Duke, 1971).

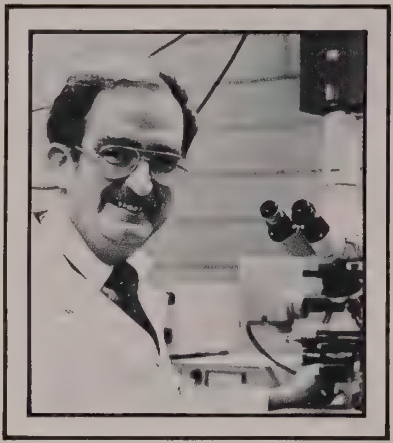


G. Ellis, M.D.



Row 1 (L to R): J. Feussner, P. McKee, B. Williams. **Row 2:** F. Lecocq, F. Neelon, G. Ellis.

HEMATOLOGY-ONCOLOGY



Wendell F. Rosse, M.D.
Chief

The Division of Hematology-Oncology was formed as the Division of Hematology in 1952. Its first Chief was Dr. Wayne Rundles, who held the then heretical idea that patients with leukemia and other hematologic malignancies could be treated. He established the methodology of the comparative clinical trial for chemotherapeutic agents and became world renowned for his thorough studies in such trials. Thus, for many years, the Division was solidly based on a large clinical practice on patients with hematologic malignancies. More recently, the interest of the Division has spread in both directions — in a more hematologic direction with emphasis on immune aspects of hematology and in a more oncologic direction with emphasis on aggressive treatment of resistant hematologic malignancies and solid tumors. During this same period, the research base has also expanded, and at the present time, twelve members of the Division have research laboratories which deal with problems ranging from protein synthesis through antibody detection, bone marrow proliferation and cryopreservation, to nucleic acid metabolism in leukemic cells, and chemotactic receptors on neutrophils.

The Division has always had a strong clinical base. The standards set by Dr. Rundles in the early years are maintained by the physicians who primarily take care of patients. This function of the Division has been made considerably easier by being based in the new Morris Building Cancer Center.

The Division takes a very active role in the Duke Comprehensive Cancer Center. Dr. Rundles was one of the original planners, and Dr. John Laszlo is Director of Clinical Programs within the Duke Comprehensive Cancer Center. The completion of the Jones Building in 1976 and the Morris Building in 1978 has provided the primary work space for research in the first case, and clinical care in the second. Many of the clinical research projects are carried out on Jordan Ward, the research ward in the Morris Building.

Since its founding, the Veterans Administration Hospital has been an important part of the Hematology Program. Shared clinical interests, shared fellows, shared faculty, and shared educational programs all have assured that the V.A. Service is an integral part of this Division.

In the coming years, we hope that the Division will continue its preeminence in clinical practice and research in order to answer the challenges which are confronting Hematology-Oncology. The diagnosis and treatment of hematologic disorders, the role of bone marrow transplantation in the treatment of hematologic disease, and better treatment for malignancies of all kinds, particularly the solid tumors, remain important challenges to the members of the Division.

Professor: Wendell F. Rosse, M.D. (Chicago, 1958), *Chief.*

Professors: John Laszlo, M.D. (Harvard, 1955); R. Wayne Rundles, M.D. (Duke, 1940); Harold R. Silberman, M.D. (Washington U., 1956).

Associate Professors: Harvey J. Cohen, M.D. (State U. of New York, 1965); Andrew T. Huang, M.D. (Taiwan, 1965); Gerald Logue, M.D. (Pittsburgh, 1966).

Assistant Professors: Judith C. Andersen, M.D. (Jefferson, 1969); Peter Tallos, M.D. (U. of Sydney, 1969); J. Brice Weinberg, M.D. (Arkansas, 1969).

Associates: Theresa M. Blumfelder, M.D. (U. of Missouri, 1973); Edwin B. Cox, M.D. (Duke, 1971); Jeffrey Crawford, M.D. (Ohio, 1974); Joseph W. Fay, M.D. (Ohio, 1972); Russel Kaufman, M.D. (Ohio, 1973); Roger J. Kurlander, M.D. (Chicago, 1971); Len B. Lastinger, M.D. (Emory, 1970); Joseph Moore, M.D. (Johns Hopkins, 1970); James E. Niedel, M.D. (Miami, 1973).

Medical Research Professor: Joseph E. Sokal, M.D. (Yale, 1940).

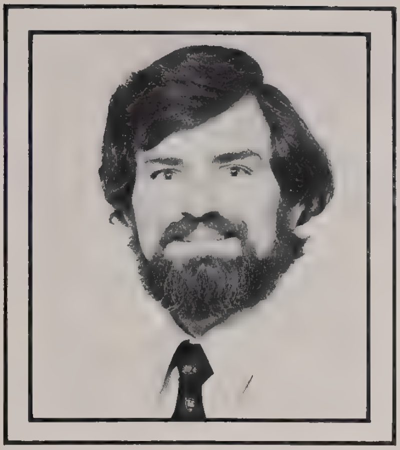
Assistant Medical Research Professor: W. David Sedwick, Ph.D. (Pennsylvania, 1970).

Medical Research Associate: Emily Reisner, Ph.D. (Case Western Reserve, 1969).

T. Blumfelder, M.D., and L. Lastinger, M.D.

Row 1 (L to R): P. Tallos, J. Moore, W. Rundles, A. Huang, E. Reisner, B. Weinberg, J. Andersen, T. Blumfelder. **Row 2:** W. Rosse, W. Brenckman, L. Lastinger, E. Cox, J. Laszlo, H. Silberman, J. Fay, R. Kurlander, H. Cohen.

INFECTIOUS DISEASES



David T. Durack, M.D.
Chief

In 1930, Dr. D.T. Smith "founded" Infectious Diseases at Duke. As Chairman of Microbiology he built a nationally recognized department and simultaneously lent his expertise to clinical problems. Dr. N.F. Conant, in Dr. Smith's group, built Duke's strong reputation in mycology. In 1959, Dr. Suydam Osterhout came from the Rockefeller University to strengthen the clinical service, and in 1977 Dr. David Durack came to Duke from the University of Washington to become the present Chief of the Division.

The Division of Infectious Diseases provides consultation for patients with infection-related problems for the Medical Center, as well as for other hospitals and practitioners in the State of North Carolina. Our faculty members maintain a strong interest in general internal medicine, believing that this background makes the best basis for effective specialist consultation in the field of infectious diseases. We are particularly interested in the following areas:

Bloodstream infections, such as gram-negative sepsis and endocarditis.
Infections in seriously ill patients with compromised natural defenses.
Treatment of serious virus infections in cancer patients.
Rational and economical use of antibiotics.

We frequently provide consultation to outside physicians by telephone and work with them on the management of patients referred to this Medical Center. The Division maintains an active training program for fellows preparing to become specialists in Infectious Diseases. Division members place a high priority on student teaching by allotting sufficient time to student-related activities.

Division members are engaged in several laboratory research projects related to human and animal infections. Using animal models of the human disease, we are studying the factors that lead to development of meningitis. This research involves a variety of different organisms, including bacteria and fungi. The effect of different forms of treatment on experimental meningitis is tested in order to find the best regimens for treatment of humans. At the same time, *in vitro* research is being conducted to compare the inhibitory effects of new antibiotics on pathogenic bacteria and fungi. Other experiments are underway to study the interaction of bacteria with antibodies and complement in patients' sera. Another area of research interest is a study on the influence of virus infections on the function of the immune system. For example, the effect of an experimental viral infection, which is concurrent with skin grafting, on the time taken for graft rejection is under investigation. A cooperative study is in progress with a new viral agent for the treatment of severe virus infections that develop during the treatment of malignant diseases.

The Division of Infectious Diseases looks forward to being part of the second fifty years of Duke Medical Center.

Associate Professor: David T. Durack, M.D. (Oxford, 1973), *Chief.*
Associate Professor: John D. Hamilton, M.D. (Colorado, 1964).
Assistant Professors: Harry A. Gallis, M.D. (Duke, 1967); Robert J. Sullivan, Jr., M.D. (Cornell, 1966).
Associate: G. Ralph Corey, M.D. (Baylor, 1973).

J. D. Hamilton, M.D.

H. A. Gallis, M.D.

Row 1 (L to R): J. Perfect, D. Barry, S. Osterhout, A. Spanos. **Row 2:** D. Durack, H. Gallis, M. Moeller.

NEPHROLOGY

Roscoe R. Robinson, M.D. Chief

By the late 1950's, the Duke faculty in Medicine included several individuals with an interest in various facets of the clinical discipline now known as nephrology. Major contributions to our understanding of kidney diseases, hypertension, and disorders of salt and water metabolism had been made by faculty members such as Drs. E.S. Orgain, W. Kempner, E. Peschel, H.D. McIntosh, F. Engel, W.H. Nicholson and others. The advent of chronic hemodialysis in 1960 accelerated the need for a cohesive divisional organization, and the Division of Nephrology was established in 1962 with Dr. Roscoe Robinson as its first Director. He was soon joined by Drs. J. Caulie Gunnells, Charles P. Hayes, Jr. and James R. Clapp. Drs. Hayes and Gunnells led the way in the establishment of North Carolina's first formal program in maintenance hemodialysis for patients with endstage kidney disease, while Dr. Clapp led the Division's entrance into the research world of kidney micropuncture. The Division continued to prosper and now includes thirteen full-time faculty and research associates whose clinical and research interests are broad and varied.

Clinical responsibilities focus on the diagnosis and treatment of patients with medical diseases of the kidneys, hypertension, disorders of electrolyte and acid-base metabolism, and the provision of services to patients with end-stage kidney disease. Under the direction of Drs. Gutman, Gunnells, Clapp, and Stead, the latter includes maintenance hemodialysis (either center- or home-based), automated peritoneal dialysis, chronic ambulatory peritoneal dialysis, and kidney transplantation.

The research interests of the faculty presently include applied studies of the renin-angiotensin-aldosterone and sympathetic nervous systems in hypertension, examination of kidney ultrastructure in health and disease with particular emphasis on the relationship between ultrastructural events and physiological processes, studies of membrane transport using the isolated perfused tubule studies of altered renal functions in experimental forms of kidney disease, and mechanisms of massive natriuresis and compensatory renal hypertrophy. These bench-oriented studies are complemented by a variety of other studies that are patient-oriented.

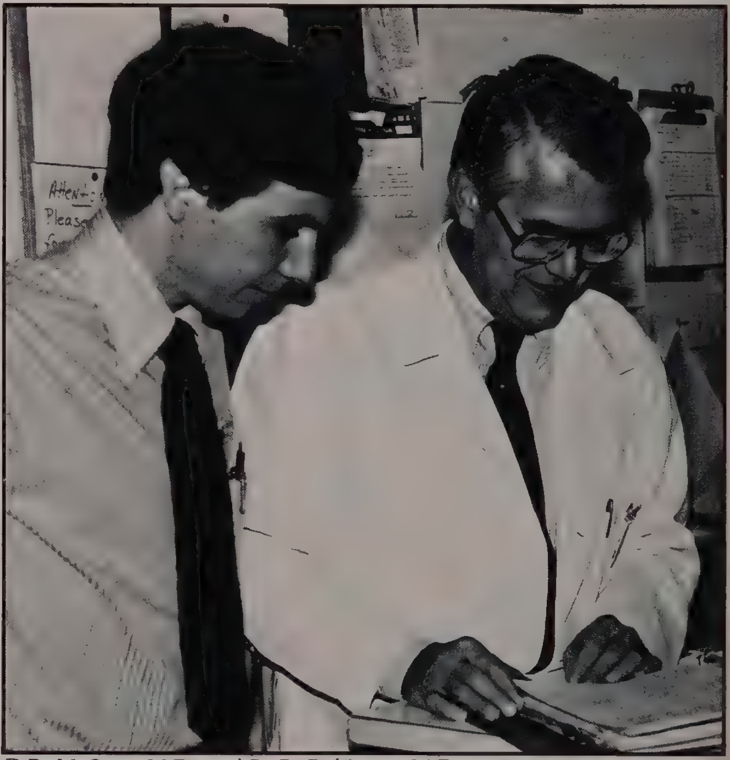
Professor: Roscoe R. Robinson, M.D. (Oklahoma, 1954), *Chief.*

Professors: James R. Clapp, M.D. (U.N.C. at Chapel Hill, 1957); J. Caulie Gunnells, M.D. (South Carolina Med. Coll., 1956); C. Craig Tisher, M.D. (Washington U., 1961).

Associate Professors: Vincent W. Dennis, M.D. (Georgetown, 1966); Robert A. Gutman, M.D. (Florida, 1962); William E. Yarger, M.D. (Baylor, 1963).

Assistant Professors: Robert H. Harris, M.D. (Georgia, 1966); Richard M. Portwood, M.D. (Texas, 1954).

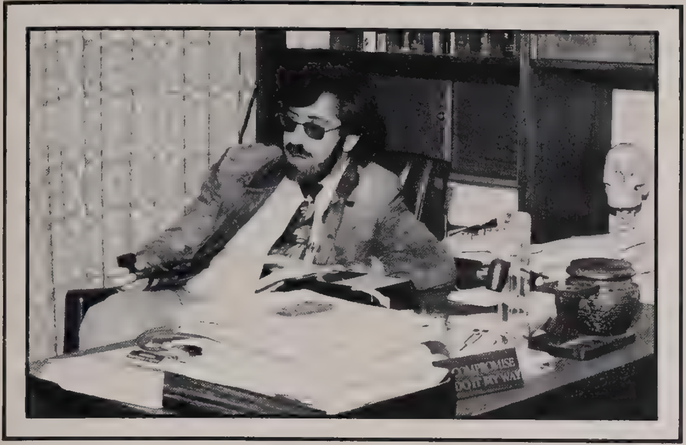
Associates: Peter C. Brazy, M.D. (Washington U., 1972); Steven H. Grossman, M.D. (Med. Coll. of Virginia, 1973); William W. Stead, M.D. (Duke, 1973).



D.R. McCann, M.D., and R. R. Robinson, M.D.

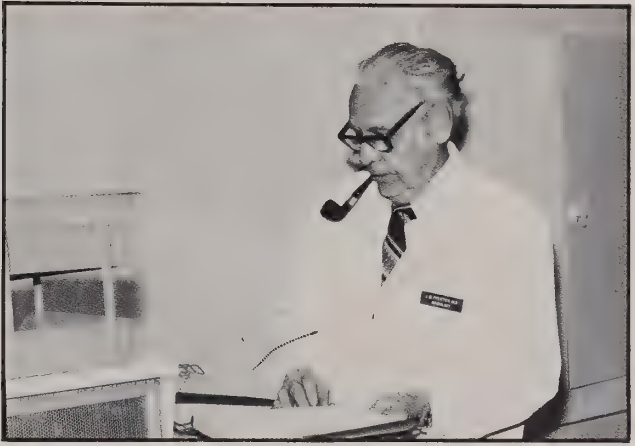
Row 1 (L to R): J. Clapp, R. Gutman, R. Robinson, W. Yarger, C. Tisher. **Row 2:** R. Harris, V. Dennis, P. Brazy, W. Stead, S. Grossman, A. LeFurgey, K. Madsen. **Not Pictured:** C. Gunnells.

NEUROLOGY



Allen D. Roses, M.D.
Chief

Professor Sir John Walton and Dr. Allen Roses, September, 1979


J. B. Pfeiffer, Jr., M.D.

The Division of Neurology has developed rapidly during the past ten years, reflecting the recent growth of clinical and basic neurosciences. Neurology at Duke was an active consultation service with a specialized inpatient and outpatient practice for most of the first forty years. Professor Frederick Hanes, one of the first Chairmen of the Department of Medicine, considered neurology his area of medical specialization.

Today the Division of Neurology is actively involved in patient service, physician training, and research. Programs are designed to enable clinical and research areas to actively complement each other. For fifteen years the Duke-Veterans Administration Hospital Stroke Center has been actively involved in basic and applied stroke research. Current areas of active research also include epileptic, neuromuscular, neurogenetic, degenerative, neuroimmunological, and neuroncological diseases. These areas are complemented by specialty clinical services, such as the Epilepsy Monitoring Unit and Clinic, Muscular Dystrophy Association Clinic, Neuromuscular Research Clinic, Multiple Sclerosis Clinical Center, Parkinson's Disease Rehabilitation Center, and an active involvement in the Cancer Center. These clinical, research, and training programs are considered among the outstanding units in the United States. With the current explosion of knowledge in the neurosciences, the Division of Neurology is in an excellent position to participate in and take early advantage of clinically relevant research opportunities and developments. Since much of the growth of Neurology has occurred after the development of the "new curriculum" in the late 1960's, the Division's exposure to medical student teaching has been limited. A current high priority Divisional goal is to adequately present basic and clinical neurology early in the medical school curriculum.

Associate Professor: Allen D. Roses, M.D. (Pennsylvania, 1967), *Chief.*
Professors: Albert Heyman, M.D. (Maryland, 1940); John B. Pfeiffer, Jr., M.D. (Cornell, 1942).
Associate Professors: James N. Davis, M.D. (Cornell, 1965); Ara Tourian, M.D. (Iowa, 1958).
Assistant Professors: Barrie J. Hurwitz, M.B. (Witwatersrand U., 1968); E. Wayne Massey, M.D. (U. of Texas, 1970); James O. McNamara, M.D. (Michigan, 1968); C. Warren Olanow, M.D. (Toronto, 1965); S. Clifford Schold, M.D. (Arizona, 1973).
Associate: Geoffrey Hartwig, M.D. (Duke, 1972).

Residents: Andrew C. Bragdon, M.D. (Washington Univ., 1977); Richard M. Dasheiff, M.D. (Maryland, 1976); Miles E. Drake, M.D. (Duke, 1977); Lindy E. Harrell, M.D. (Miami, 1977); John Scott Luther, M.D. (U.N.C., 1974); Benjamin Mark, M.D. (New Jersey Med. School, 1976); Janice M. Massey, M.D. (Georgetown, 1978); Benjamin Moore, M.D. (Duke, 1975); Barbara J. Scherokman, M.D. (Med. Coll. of Georgia, 1975); Donald E. Schmechel, M.D. (Harvard, 1974); Cheolsu Shin, M.D. (Alabama, 1977); Norman S. Werdiger, M.D. (Cornell, 1977).

Row 1 (L to R): B. Drayer, C. Schold, A. Roses, T. Peele, J. Luther. **Row 2:** A. Tourian, W. Wilson, J. Davis, B. Hurwitz, J. McNamara, B. Erwin.

PULMONARY-ALLERGY

James D. Crapo, M.D.
Chief

The first member of the Allergy and Respiratory Medicine Division at Duke was Dr. John Hickam, who came to Duke in 1947 with Dr. Eugene Stead. Dr. Hickam's initial interest was in cardiovascular medicine, but he recognized the need for faculty interested in lung disease. Since his research interests overlapped, he gradually moved toward lung-related investigations. During his years at Duke, Dr. Hickam made many notable contributions in the area of pulmonary physiology and had a strong association with Dr. F.G. Hall, the Chairman of Physiology at Duke and an internationally known environmental respiratory physiologist. Dr. Hickam left in 1958 to become Chairman of the Department of Medicine at Indiana. Dr. Herbert Sieker had trained at Duke under Dr. Hickam, and when a formal divisional structure emerged in the late 1950's, he became the first Chief of the Division. Dr. Herbert Saltzman joined the Division in 1958, and at that time he and Dr. Sieker were the two people in the Division primarily interested in research. Both of them were involved in studies of cardiopulmonary physiology and carried out limited clinical practices with Dr. Sieker working in Duke Hospital and Dr. Saltzman running the Pulmonary Division at the Durham Veterans Administration Hospital. Dr. Elijah Memfee carried on the major pulmonary medical practice at Duke, and Dr. Oscar Hanson-Pruss was the clinical allergist. In addition to these four faculty members, there were two to three fellows being trained at any one time. In 1962, Dr. Kay Kilburn joined the faculty and over the next ten years established a research program involving environmental factors in lung disease, such as dust, cotton, etc. His primary base was at the V.A. Hospital, where he served as the head of the medical service for several years. The hyperbaric research program grew very rapidly after the establishment of the Hall Laboratory for environmental research. Dr. Herb Saltzman moved from the V.A. Hospital to Duke, and in 1964 he was appointed Director of the Hall Laboratory research program. He remained in that position until he turned it over to Dr. Peter Bennett in 1977. This group became internationally recognized in the area of undersea physiology in 1968 with the performance of the first saturation dive to one thousand feet, which was a historic experiment both operationally and scientifically.

Dr. Philip Pratt came to Duke in 1966 in the Department of Pathology and with his interest in pulmonary pathology added a significant dimension to the research and training program in lung disease. Dr. Ed Buckley joined the faculty after training as a pulmonary fellow in 1963. Dr. Hans Kylstra came to Duke in 1965. He was active in research in the Hall Laboratory and eventually assumed responsibility for the Pulmonary Function Laboratory and the Fiberoptic Bronchoscopy services.

Dr. James Crapo joined the Division in 1976 after completing residency and fellowship training at Duke, and in 1979 he became the current Chief of the Division. At the present time there are eleven clinical faculty and ten fellows in the Division.

The faculty members of the Division of Allergy and Respiratory Disease are currently involved in four broad areas of research: (1) Respiratory Physiology; (2) Morphometry and Biochemistry of the Lung; (3) Immunogenetics of Respiratory Disease; and (4) Evnironmental Respiratory Disease.

Associate Professor: James D. Crapo, M.D. (Rochester, 1971), *Chief.*

Professors: Charles E. Buckley, M.D. (Duke, 1954); Johannes A. Kylstra, M.D. (U. of Leiden, 1952); William S. Lynn, M.D. (Columbia, 1946); Herbert A. Saltzman, M.D. (Jefferson, 1952); Herbert O. Sieker, M.D. (Washington U., 1948).

Assistant Professors: Douglas G. Kelling, M.D. (Harvard, 1972); Stephen L. Young, M.D. (U. of California, 1968).

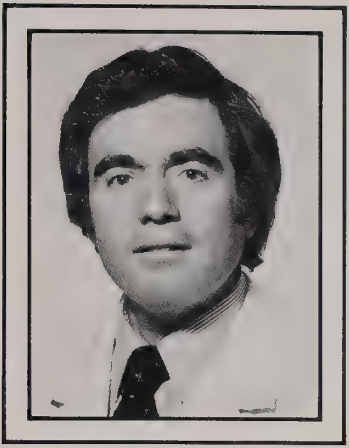
Associates: Michael G. Ehrie, M.D. (U. of Louisville, 1974); Khalih Kariman, M.D. (Meshed, 1969); Scott A. Kremers, M.D. (Indiana U., 1974); Lewis J. Rubin, M.D. (Albert Einstein, 1975).

Assistant Medical Research Professor: Sambhu N. Bhattacharyya, Ph.D. (U. of Calcutta, 1969).

Medical Research Associates: Chhabirani Mukherjee, Ph.D. (U. of Calcutta, 1969); Sakti P. Mukherjee, M.D. (U. of Calcutta, 1973); Mary C. Rose, Ph.D. (Case Western, 1970).

Row 1 (L to R): G. Burke, W. Smith, M. Topolosky, S. Kremers. **Row 2:** J. Cohn, J. Crapo, M. Ehrie, C. Dalto, C. Buckley, J. Ginsberg, H. Sieker. **Row 3 and 4:** L. Rubin, H. Giraldo, S. Young, W. Lynn, L. Geary, B. Freeman.

RHEUMATIC-GENETIC DISEASE



Ralph Snyderman, M.D.
Chief

The Rheumatology Division was begun in 1954 through the combined efforts of Dr. Grace Kerby and Dr. Elbert Persons. Dr. Kerby organized the first Rheumatology Clinic in the State of North Carolina, and Dr. Persons was the first Chief of the Division at Duke. In 1961, Dr. James B. Wyngaarden became the second Chief of the Division of Rheumatology. Under his guidance the Division developed an internationally recognized research effort in the field of purine metabolism. In 1965, Dr. Grace Kerby was appointed Chief of the Division of Rheumatology and functioned in that capacity until 1971. During her tenure as Chief, the Division continued to grow both in clinical and research strength. In 1971, Dr. William Kelley was appointed Chief of the Division and expanded the breadth of the clinical and research functions so that genetic diseases were an important component of the Division's responsibilities. Dr. Kelley was responsible for initiating rapid expansion of both the research and training programs related to both rheumatic and genetic diseases. Dr. Kelley left Duke in 1976, and Dr. Ralph Snyderman was appointed as the Chief of the Division of Rheumatic and Genetic Diseases. Since 1976 the Division has maintained its intense research efforts in the field of purine metabolism but has also expanded its efforts in the field of immunology. The Division now consists of nine faculty members, four clinical fellows, and six research fellows. The Division is recognized as a National Arthritis Center by the Arthritis Foundation and is internationally recognized for its research programs, clinical training programs, as well as for patient care. The major research interests of the Division focus upon immunogenetics and immunoregulatory processes, purine metabolism and control of purine biosynthesis, sulfur metabolism, regulation of transmethylation reactions, mechanisms of adenosine toxicity, and the mechanisms by which the immune system initiates, propagates and controls inflammatory responses. Individuals trained within the Division of Rheumatic and Genetic Diseases are having an important impact not only in the field of clinical rheumatology, but also as basic and clinical researchers and academicians.

Professor: Ralph Snyderman, M.D. (State U. of New York, Downstate Med. Ctr., 1965), *Chief.*

Professors: Grace P. Kerby, M.D. (Duke, 1946); James B. Wyngaarden, M.D. (Michigan, 1948).

Associate Professors: Edward W. Holmes, M.D. (Pennsylvania, 1967); Nicholas M. Kredich, M.D. (Michigan, 1962); Peter F. Pepe, M.D. (Temple, 1966).

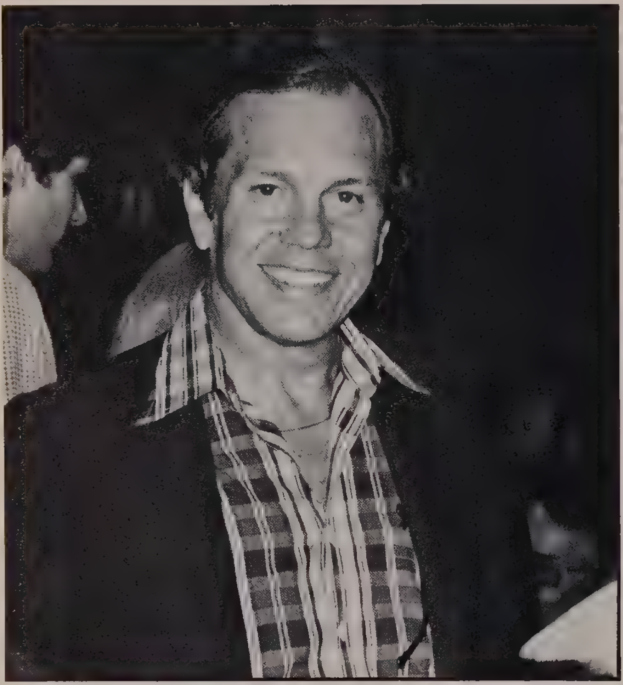
Assistant Professors: David S. Caldwell,, M.D. (Bowman Gray, 1967); Michael S. Hershfield, M.D. (Pennsylvania, 1967); David S. Pisetsky, M.D. (Albert Einstein, 1973); John R. Rice, M.D. (Miami, 1968).

E. W. Holmes, M.D.

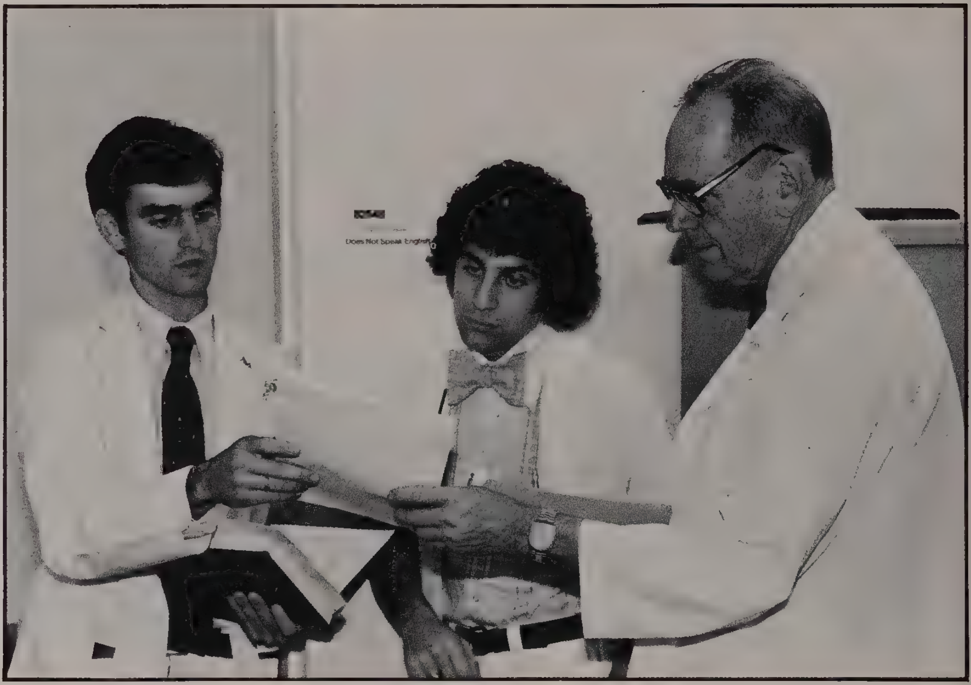
Row 1 (L to R): P. Pepe, N. Kredich, D. German, R. Snyderman, D. Pisetsky. **Row 2:** J. Wyngaarden, G. McCarty, M. Hershfield, K. Lohr. **Row 3:** W. Gough, C. Stephens, N. Hudson, T. Santoro, J. Rice. **Not Pictured:** D. Caldwell, C. Garrett, E. Holmes, Jr., D. Kredich, T. Rouault.

David Sedwick, Ph.D., and Pam Sholar

Jim Sosnowchik, M.D.



James B. Wyngaarden, M.D.

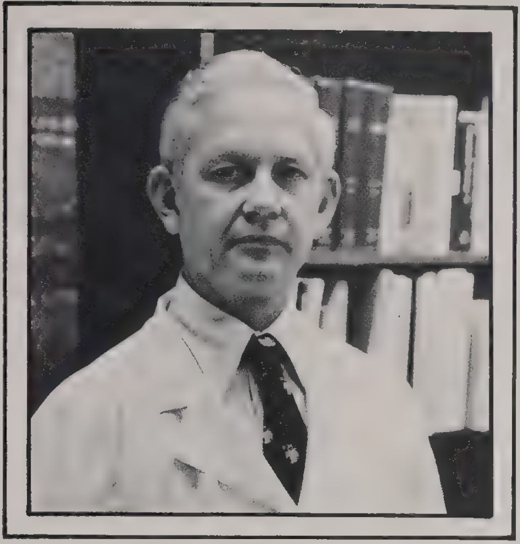


Drs. Skip Burton, Paul Klotman, and Eugene Stead

Dennis McCann, Jr., M.D.

Herbert Saltzman, M.D.

MICROBIOLOGY AND IMMUNOLOGY



Wolfgang K. Joklik, D. Phil.
Chairman

The Scope of Modern Microbiology and Immunology

Few branches of natural science have changed as extensively during the last two or three decades as Microbiology and Immunology.

Microbiology was, until recently, predominantly an applied field concerned with controlling those microbes that affect man's health or his economic wealth. Today microbiology is at the center of the biological stage. To be sure, the study of microorganisms per se is still a primary aim of microbiology, and the conquest of microorganisms causing disease is more than ever the goal of that branch of microbiology which is established in medical schools. However, it has become evident that microorganisms, including viruses, constitute genetic systems of unique simplicity as well as accessibility and that their study can provide the conceptual basis for investigating far more complicated cells such as mammalian, and in particular, human cells. By providing model systems, microbiology finds itself at the forefront of the study of the control of the expression of genetic information, the molecular mechanisms of active transport, differentiation, and cancer — to name only a few.

The association of immunology with microbiology stems from the time when microorganisms were the only readily available and medically important antigens, and when immunology provided the only defense against disease. This too has now changed, and immunology has evolved into a distinct discipline which far transcends its traditional role; today it is an equal and essential partner with many other disciplines. Thus, at the molecular level, an understanding of the mechanism of synthesis of antibody is providing clues in the quest to understand differentiation, while an understanding of antigen-antibody interactions is clarifying the nature of complementarity; at the biological level, an understanding of cellular immunity offers one of the brightest hopes in the fight against cancer; and at the clinical level, an understanding of the factors involved in transplantation immunity will surely usher in a new era in medicine.

History of the Department

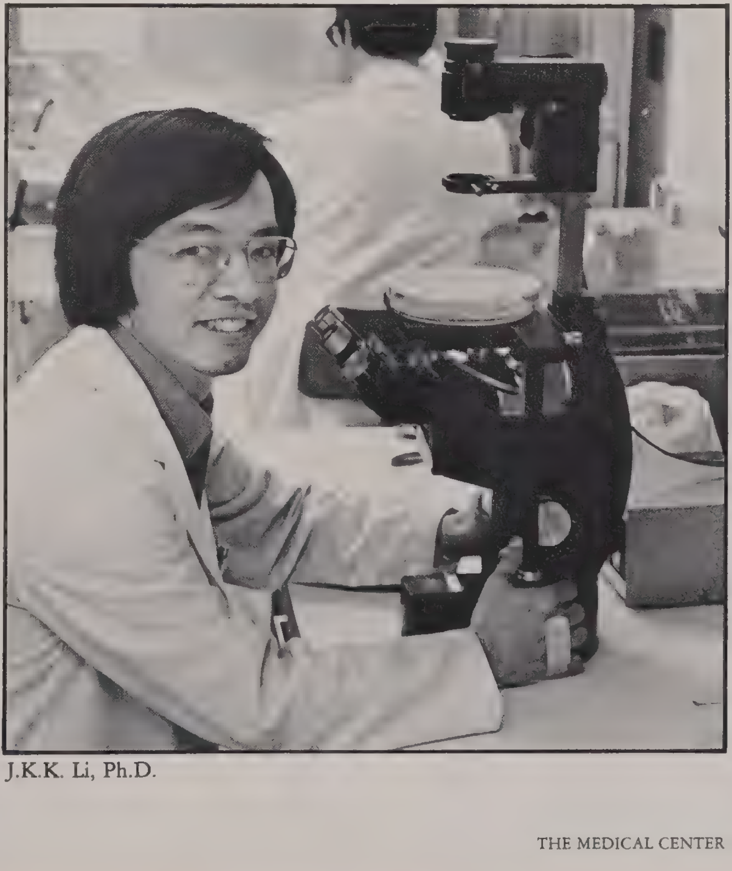
The first Chairman of the Department of Microbiology was Dr. David Tillerson Smith, who arrived at Duke in 1930. He was a noted expert in the field of infectious diseases in general, and tuberculosis in particular. In collaboration with his wife, Susan Gower Smith, he was in the forefront of research that led to the identification of nicotinic acid as one of the B vitamins. He was succeeded in 1958 by Dr. Norman F. Conant, a noted mycologist. It was several years thereafter that the Department was joined by the Division of Immunology, under Dr. D. Bernard Amos, and became the Department of Microbiology and Immunology. Dr. Conant was succeeded in 1968 by the present chairman, Dr. Wolfgang K. Joklik, who is a virologist and molecular biologist.

In the early days the Department was housed in the Davison Building, in close proximity with the hospital. Before long, however, inability to expand in this location forced the Department to move into other buildings of the Medical Center, such as the Bell Building (1948), Research Park Buildings 3 and 4 (1966-1970), and, most recently (1977), the Jones Building, which is the Basic Cancer Research Building of the Duke University Comprehensive Cancer Center and in which the Department now occupies most of two floors.

For the first three and a half decades of its existence, the Department was fairly small, with the faculty rarely exceeding five to ten individuals. During the last decade, however, it has grown rapidly, and today it numbers forty-one faculty members. In addition there are twenty-three faculty members who hold primary appointments in other departments, but who have a joint appointment in the Department of Microbiology and Immunology. Thirty-one postdoctoral fellows and fifty-five graduate students are in residence at this time.

The Teaching Program

The Department teaches at several levels. We teach the fundamental Microbiology and Immunology courses to first-year medical students (in the second semester) and have designed several courses and programs specifically for medical students in the basic science elective third year of the Duke curriculum. All teaching of Infectious Diseases is carried out under the aegis of this Department. The Department also has a graduate program that includes a three semester didactic teaching sequence and also teaches at the undergraduate level, offering courses both in immunology and in molecular microbiology.



J.K.K. Li, Ph.D.

The Research Interests of the Faculty

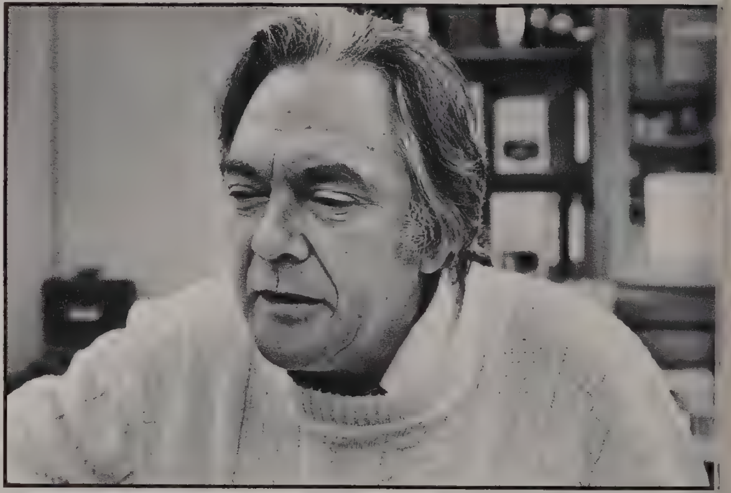
The research interests of faculty members range widely through the field of Microbiology and Immunology. Among the strengths for which the Department is noted are animal virology, including viral oncology; immunology, including cellular and tumor immunology; and molecular biology of both prokaryotic and eukaryotic systems. In all these areas there is not only a strong basic research effort, but also close interaction with the research carried out by clinical faculty members in the areas of infectious disease, allergy, and oncology; many of these faculty members have joint appointments in the Department.

Almost all faculty members of the Department have their own individual research grants; the total amount of research support currently in the Department exceeds three million dollars. In addition the Department participates prominently in the programs of the Duke University Comprehensive Cancer Center, and the Chairman of the Department, Dr. W.K. Joklik, is Director of Basic Cancer Research. The Department has also been successful in attracting funds exceeding $500,000 per year for training predoctoral and postdoctoral fellows.

Future Prospects

With the occupation of laboratories in the Jones Basic Cancer Research Building, the Department has expanded to a size that is unlikely to change significantly during the next decade. We do, however, still have opportunities for initiating new programs in developing and intellectually stimulating areas. In particular, we are anxious to expand our efforts in that area of research that deals with the interaction of microbial agents with the organism as a whole, rather than merely with certain of its cells; the area of somatic cell genetics dealing with the arrangement of genetic material in the human genome and with the mechanisms that control its expression; and the area of genetic engineering, without which a great deal of the research that is under intensive investigation today was deemed impossible less than five years ago. Above all, we hope that we will be even more successful than we have been in the past in combining outstanding basic research with outstanding clinical research.

S. Miller, Ph.D.



B. Amos, M.D.

MICROBIOLOGY AND IMMUNOLOGY FACULTY

Row 1 (L to R): S. Endow, S. Miller, W. Joklik, H. Willett, J. Li. **Row 2:** R. Wheat, D. Scott, J. Keene, R. Smith, C. Whisnant, L. Lachman, E. Day, V. Varitek. **Row 3:** T. Mitchell, J. Cambier, J. Dawson, R. Corley, R. Metzgar.

James B. Duke Professor: Wolfgang K. Joklik, D. Phil. (Oxford, 1952), *Chairman.*

James B. Duke Professor: D. Bernard Amos, M.D. (Guy's Hospital, London, 1963).

Professors: Rebecca H. Buckley, M.D. (U.N.C. at Chapel Hill, 1958); Richard O. Burns, Ph.D. (Illinois, 1962); Eugene D. Day, Ph.D. (Delaware, 1952); Richard S. Metzgar, Ph.D. (Buffalo, 1959); Suydam Osterhout, M.D. (Duke, 1949), Ph.D. (Rockefeller Inst., 1959); Wendell F. Rosse, M.D. (Chicago, 1958); David W. Scott, Ph.D. (Yale, 1969); Thomas C. Vanaman, Ph.D. (Duke, 1968); Frances E. Ward, Ph.D. (Brown, 1965); Robert W. Wheat, Ph.D. (Washington Univ., 1955); Hilda P. Willett, Ph.D. (Duke, 1949).

Medical Research Professor: Igor K. Egorov, Ph.D. (Institute of General Genetics, Moscow, 1968).

Adjunct Professors: James J. Burchall, Ph.D. (Illinois, 1963); John E. Larsh, Jr., Sc.D. (Johns Hopkins, 1943).

Associate Professors: Deepak Bastia, Ph.D. (Chicago, 1971); Dani P. Bolognesi, Ph.D. (Duke, 1967); Peter Cresswell, Ph.D. (London, 1971); Jeffrey R. Dawson, Ph.D. (Case Western Reserve, 1969); David T. Durack, D. Phil. (Oxford, 1973); Dolph Klein, Ph.D. (Rutgers, 1961); David J. Lang, M.D. (Harvard, 1958); Nelson L. Levy, M.D. (Columbia, 1967); Ph.D. (Duke, 1973); Harvey J. Sage, Ph.D. (Yale, 1958); Hilliard F. Seigler, M.D. (U.N.C. at Chapel Hill, 1960); Ralph E. Smith, Ph.D. (Colorado, 1968); Ralph Snyderman, M.D. (State Univ. of New York, Downstate Med. Center, 1965); Catherine Wilfert, M.D. (Harvard, 1962); Peter J. Zwadyk, Ph.D. (Iowa, 1971).

Assistant Professors: Dolph O. Adams, M.D. (Medical College of Georgia, 1965); Ph.D. (U.N.C. at Chapel Hill, 1969); Charles E. Buckley, III, M.D. (Duke, 1954); John C. Cambier, Ph.D. (Iowa, 1975); Jeffrey J. Collins, Ph.D. (Harvard, 1972); Ronald B. Corley, Ph.D. (Duke, 1975); Sharyn Endow, Ph.D. (Yale, 1975); Linda R. Gooding, Ph.D. (Cornell, 1972); Gale B. Hill, Ph.D. (Duke, 1966); Jack D. Keene, Ph.D. (Washington, 1974); Hillel S. Koren, Ph.D. (Freiburg and Max Planck Inst., 1971); Peter K. Lauf, M.D. (Freiburg, 1960); David R. McClay, Jr., (U.N.C. at Chapel Hill, 1971); Thomas G. Mitchell, Ph.D. (Tulane, 1971); David S. Pisetsky, Ph.D., M.D. (Albert Einstein College of Med., 1972, 1973); Samuel A. Wells, Jr., M.D. (Emory, 1961).

Assistant Medical Research Professors: Vickers Burdett, Ph.D. (Georgetown, 1973); Edward C. Hayes, III, Ph.D. (Rutgers, 1970); William H. Hubbard, Ph.D. (Iowa State, 1973); Armead H. Johnson, Ph.D. (Baylor, 1971); Lawrence B. Lachman, Ph.D. (Boston, 1973); Nancy Mendell, Ph.D. (U.N.C. at Chapel Hill, 1972); Sara E. Miller, Ph.D. (Georgia, 1972); Emily G. Reisner, Ph.D. (Case Western Reserve, 1969); W. David Sedwick, Ph.D. (Pennsylvania, 1970); Stephen R. Turner, Ph.D. (Duke, 1971).

Adjunct Assistant Professors: Lynn P. Elwell, Ph.D. (Oregon, 1974); Lorraine Flaherty, Ph.D. (Cornell, 1973); John K. Whisnant, Jr., M.D. (Wake Forest, 1968).

Associate: Harry A. Gallis, M.D. (Duke, 1967).

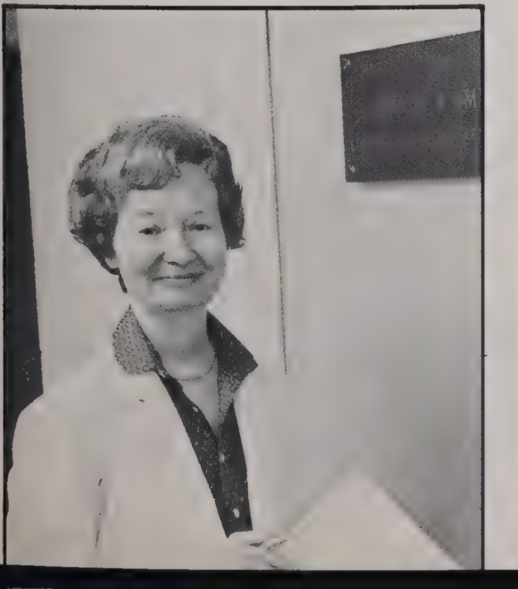
Medical Research Associates: Patricia J. Baker, Ph.D. (Illinois, 1976); Enrique G. Estevez, Ph.D. (Miami, 1976); Jon C. Graff, Ph.D. (Maryland, 1971); Joseph K. K. Li, Ph.D. (California at Los Angeles, 1974); Susan Radka, Ph.D. (Pittsburgh, 1977); Kay H. Singer, Ph.D. (Duke, 1977); Vincent A. Varitek, Jr., Ph.D. (Duke, 1977); Carol C. Whisnant, Ph.D. (Duke, 1975); Larry L. Wright, Ph.D. (Georgia, 1975).

Lecturers: Darell D. Bigner, M.D. (Duke, 1965); Alfred P. Sanfilippo, Ph.D. (Duke, 1975); M.D. (Duke, 1976).

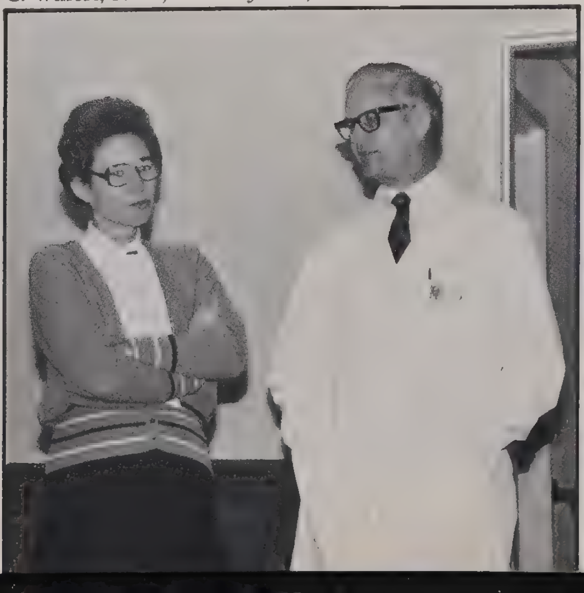
Instructors: A. Proctor, M.S.

Research Associates: A. Berger, Ph.D., D. Bullard, M.D., W. Cashdollar, Ph.D., G. Cianciollo, Ph.D., T. Darrow, Ph.D., D. de Oliveira, A.B., B. Dowell, Ph.D., D. Fischer, Ph.D., S. Geier, Ph.D., S. Greenberg, M.D., G. Hudson, Ph.D., R. Klein, Ph.D., D. Iglehart, M.D., P. Jensen, Ph.D., P. Lee, Ph.D., S. Livnat, Ph.D., G. McCarty, M.D., K. Misono, Ph.D., L. Nakamura, A.B., A. Parodi, Ph.D., D. Peed, B.S., D. Pickup, Ph.D., S. Pillai, Ph.D., J. Price, Ph.D., P. Scheible, Ph.D., S. Sutjipto, Ph.D., D. Toffaletti, Ph.D., M. Veigl, Ph.D., M. Verghese, Ph.D., T. Watt, Ph.D., L. Yates, Ph.D.

H. Willett, Ph.D.



C. Wilfert, M.D., and W. Joklik, D. Phil.



V. Burdett, Ph.D.

MICROBIOLOGY AND IMMUNOLOGY GRADUATE STUDENTS AND RESEARCH ASSOCIATES

Row 1 (L to R): D. Primerano, R. Weinberg, C. Isaac, P. Lutz, K. Elkins, V. Daasch, J. Monroe, B. Dowell. **Row 2:** N. Jones, W. Cashdollar, J. Morgan, F. George, R. Gaillard, P. Lee, P. Scheible. **Row 3:** L. Yates, M. Veigl, W. Travis, E. Rinchik, B. Wray, J. McCartney, K. Misono, D. Pickup. **Row 4:** R. Klein, T. Watt, K. Switzer, E. Ward, J. Price, P. Verlander, R. Byrn, G. Jamieson, H. Shau.

R. Ziegler, M.D., Ph.D.

Drs. H. Koren, P. Weston, P. Jensen, and S. Livnat

D. Kostyu; B. Amos, Ph.D.; and K. Singer, Ph.D.

P. Cresswell, Ph.D., and J. Larrick, M.D., Ph.D.

OBSTETRICS AND GYNECOLOGY

Roy T. Parker, M.D.
Chairman

The Department of Obstetrics and Gynecology was indeed fortunate to have as its first Chairman, Professor F. Bayard Carter. Dr. Carter's classic education was gained at the University of Delaware, the Johns Hopkins School of Medicine, Oxford University as a Rhoades Scholar in Physiology, and at Yale as a resident in both medicine and in obstetrics and gynecology. He was the "Boy Professor" at the University of Virginia in 1930 when he was invited to accept the Chair at Duke. His scholarly background set the pace for the Department at Duke and had a pronounced beneficial effect upon academic obstetrics and gynecology in America. Dr. Carter was influential in the creation of the American Board and the American College of Obstetrics and Gynecology and served as president of every major national society in the discipline. This busy and productive man never forgot his primary role as a teacher of students and residents at Duke. Recognizing the need for a strong and diversified faculty, Dr. Carter appointed Dr. Robert A. Ross, who quickly assumed the responsible role of vice-chairman, educator, and superb practitioner in obstetrics and gynecology. All who knew "Daddy Ross" enjoyed his sharp wit, unique vocabulary and art of story telling. Next came Dr. E.C. Hamblen who founded the Division of Gyecological Endocrinology in 1937 and became a renowned world leader in the field. Dr. Walter L. Thomas, the first Duke trained resident to join the faculty, was interested in gynecologic surgery and oncology. Basic and clinical laboratory services and research were important goals of the Department from the outset. Mr. C.P. Jones in 1937 to set up and direct the Microbiology Laboratory with Dr. Carter for the study of genital infections. Two years later, Dr. W. Kenneth Cuyler, an endocrine physiologist with a Ph.D. in biochemistry, joined the Department to work with Dr. Hamblen. In the 1940's came Dr. Robert Creadick with a major interest in psychosomatic gynecology and Dr. Violet Turner with an interest in gyncologic endocrinology and infertility. It is apparent that even with this small faculty nucleus, Dr. Carter achieved balance in the discipline and displayed his concept that "each teacher should be an expert in some field and should know more about that ______ ______ subject than anybody else . . . and should contribute new knowledge in basic and clinical research . . . " And contribute they did.

When Drs. Carter and Ross started at Duke in the early 1930's, the maternal death rate in North Carolina was approximately 600 per 100,000 births. In the 1970's, there were 85,000 births and less than 40 maternal deaths. The chief causes of death were infection, toxemia and hemorrhage. Studies show that 75% of maternal deaths were considered preventable. During the first two years of Duke Hospital, death of patients who had septicemia associated with abortion or delivery was 13%. The challenge was maternal mortality, and the Duke faculty accepted this challenge. Dr. Carter and Mr. Jones studied the vaginal flora in so-called normal obstetric and gynecologic patients and demonstrated the importance of anaerobes as well as aerobes in genital infections. They classified and determined the pathogenecity of fungi of the genus *Candida*. Dr. Ross studied and taught prevention and maternal mortality in the cities and backroads of North Carolina.

Dr. Hamblen, a pharmacologist with a brilliantly inquiring mind who was meticulous by habit (almost to paranoia at times), diligently pursued the physiology of the endocrine glands in health and in disease. By 1945 he had published over one hundred articles and the second edition of his masterful text, *Endocrinology of Woman*. The contributions in reproductive endocrinology of Dr. E.C. Hamblen and his associates truly helped to put Duke on the map.

Dr. Thomas added major studies in diagnostic gynecology, gynecologic surgery and oncology. From 1945 to 1965, he and Dr. Carter avidly practiced and taught vaginal hysterectomy and colpoplastic repair for pelvic relaxation and radical surgery for pelvic cancer and received national acclaim. Probably the most notable contribution to womankind made by the Department during the same interval were the studies performed using the Papanicolaou smear as a diagnostic screen for cervical cancer. The Departmental Genital Cytology Laboratory, directed by Dr. Cuyler, helped to sell genital cytology to the world in more than fifty papers.

Except for Mr. C.P. Jones and Dr. Violet Turner, each of these outstanding Duke teachers has passed on. It is a pleasure to recognize them in this small way.

During the 1950's and 1960's, societal pressures forced the improvement of the status of women, especially of minority groups. Forceful movements for women were gaining sexual freedom, legalizing abortions, providing prevenception (introduction of "the pill"), teaching sex education, curbing unwanted and teenage pregnancies, controlling world propulation growth, and insuring adequate health care for the poor. The health and well being of mother and child gained attention through state and federal government programs and private forces such as the National Foundation, March of Dimes. It was in this milieu that the new Chairman of the Department, Dr. Roy T. Parker, was appointed in 1964.

The pedagogy inspired by the new Duke Medical Curriculum, of which the new chairman had been a part, and the social pressures, of which the new chairman was much concerned, caused the Department to re-examine its objectives. Accomplishments of the second generation faculty may be recorded, but only history will determine if they were true contributions.

Reproductive biology was established as the basic science orientation of the Department. These efforts have been hampered by the constraints of a reduced N.I.H. research budget and local restrictions of available laboratory space, personnel, and funding. The faculty was enlarged and broadened in an effort to fulfill these goals and to meet the needs of an increasing patient load and improved clinical teaching. Two reproductive physiologists, one neuroendocrine anatomist, one microbiologist, and one psychologist were added as basic science faculty with conjoint appointments. Twenty clinicians with specialty training in genetics, endocrinology, oncology, perinatology, immunology, and gynecology were appointed as needed and as space and finances permitted. Six of the senior faculty have accepted chairmanships in other medical centers, and some thirty others hold faculty positions. Organizationally, Divisions of Endocrinology, Perinatology, Oncology, and Gynecology were formalized to promote better patient care, education, and research.

The curriculum was redesigned in 1960 to provide a core experience for the second year students, plus senior electives appropriate for students not intending careers in obstetrics and gynecology. In order to blend the broadly-based senior elective program with residency education and to avoid duplication, the internship was made optional in 1967. The residency curriculum was redesigned to provide a four-year experience rather than a five, and the fellowship programs were relocated at the end of the residency. At the same time, residency education became more structured in order to insure intellectual and technical competence of the trainees and to utilize a growing private patient population in postgraduate education. New fellowship programs were offered by the intradisciplinary division of the Department. The fellowships were two or three years of research training and were designed to meet the credentials of the subspecialty boards and to prepare teachers. The "faculty fellows," six to eight each year, have added considerable academic strengths.

Of special note was the creation in 1966 of the Division of Perinatology by the combined efforts of the Departments of Obstetrics, Pediatrics, and Anesthesiology. For high risk mothers and babies, this has been a singular scientific and clinical endeavor. Because of Duke's expertise in Perinatology, the North Carolina Department of Human Resources has designated Duke as a Regional Perinatal Center and a statewide perinatal resource. The perinatal mortality rate, to say nothing of morbidity, has become a world wide hallmark in health care delivery and the banner of the second generation Duke faculty in the same manner that maternal mortality was the banner of the first generation.

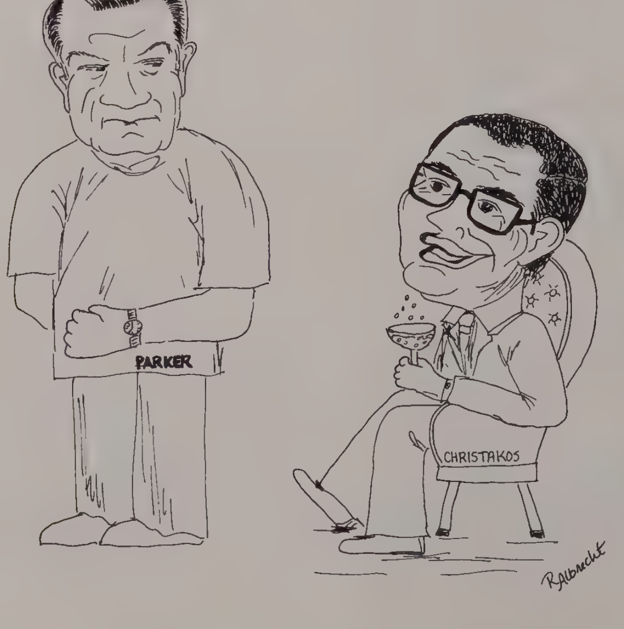
The Department set out in 1964 to broaden its community medical experience and established clinical rotations in Watts Hospital (now Durham County General Hospital), the Lincoln Clinic, and in six northeastern North Carolina counties. Later, Cabarrus Hospital in Concord and the Fayetteville Area Health Education Center (Cape Fear Valley Hospital) were added. This effort has increased the student's and resident's primary care responsibility and has enhanced the Department's role as a tertiary referral center. Annually for sixteen years (and nine departmental station wagons), the students have voted the "outrider experience" as the highlight of the rotation.

In 1974 after years of planning, the "Woman's Clinic" came into being with a new waiting room and renovated clinic space which combined the old "PDC" and "OPC" clinics. The distinction between private and public patients has been eliminated, with care for all provided by practice teams of faculty, students, residents, nurses, and other health care providers. The improvement in patient care and in student teaching has been noteworthy. Hopefully, with the renovations in Duke South and more space, ambulatory surgery, a well patient survey unit, and a model teaching program in primary care may be developed.

Research in reproductive biology has grown in the past fifteen years, but always there is the struggle to understand health and disease better. The basic and clinical research programs in endocrinology involve uterine smooth muscle function, ovarian steroidogenesis, cannabis suppression of luteninization, HCG B-subunit radioimmunaossay methodology, ovulation induction, fertility control, and estrogen replacement therapy. In cancer, studies include diagnosis and treatment of trophoblastic disease, genesis of cervical cancer, estrogen receptors in endometrial cancer, chemotherapy of ovarian and other poor prognosis cancers, and radical surgery for primary disease. Pregnancy related investigations comprise genetic diseases, blood flow and oxygen transport mechanisms, biologic measurements of placental function, maternal-fetal relationship in health and disease, hypertensive disorders, disabetes, and infectious diseases complicating pregnancy. Immunologic studies focus on Rh isoimmunization, ovarian cancer, infertility, and infection. Gynecologic research includes anaerobic, viral, and venereal infections, operative gynecology, endometriosis, disorders of pelvic relaxation, and health care delivery. The struggle goes on.

The Chairman and the Medical Center Administration are grateful to the second generation faculty for their talent, diligence, good work, and that intangible quality performance that is "Duke". There is a rising sentiment among the citizens of this country and health care in general, and maternal and infant care in particular, are not privileges but rights. Indeed, the 1980's will probably be termed "the decade of the mother and child." In this the fiftieth year of the Duke University Medical Center, and the year of my chosen retirement as Chairman of the Department, I can only say thank you Duke; it has been the privilege of my life.

Roy T. Parker, M.D.



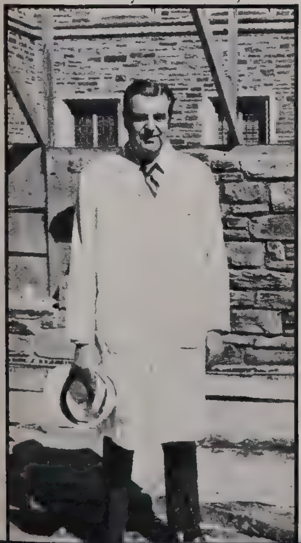
OBSTETRICS AND GYNECOLOGY FACULTY

Row 1 (L to R): D. Schomberg, W. Creasman, R. Parker, A. Grandis, N. Anderson. **Row 2:** F. Jelovsek, B. Fetter, L. Clayton, H. Wiebe, E. Tyrey. **Row 3:** D. Clarke-Pearson, J. Currie, G. Hill, S. Gall, D. Nagey. **Row 4:** S. Welt, M. Crenshaw, C. Peete, A. Christakos, J. Weed. **Row 5:** B. Gebhardt, H. Brown, L. Kaufmann.

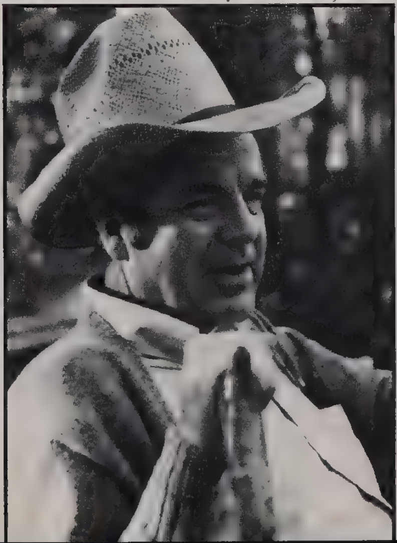
Professor: Roy T. Parker, M.D. (Med. Coll. of Virginia, 1944), *Chairman.*
Professors: Phillip R. Bromage, M.D. (St. Thomas Hospital, London Univ., 1943); Arthur C. Christakos, M.D. (Med. Coll. of South Carolina, 1955); William T. Creasman, M.D. (Baylor, 1966); M. Carlyle Crenshaw, Jr., M.D. (Duke, 1956); Stanley A. Gall, M.D. (Minnesota, 1962); Charles B. Hammond, M.D. (Duke, 1961); Charles H. Peete, Jr., M.D. (Harvard, 1947).
Clinical Professor: Leonard E. Laufe, M.D. (Univ. of Louisville, 1949).
Associate Professors: W. Allen Addison, M.D. (Duke, 1960); Lillian R. Blackmon, M.D. (Arkansas, 1963); George W. Brumley, Jr., M.D. (Duke, 1960); Gale B. Hill, Ph.D. (Duke, 1966); David W. Schomberg, Ph.D. (Purdue, 1965); E. Lee Tyrey, Ph.D. (Illinois, 1969); John C. Weed, Jr., M.D. (Duke, 1968); R. Herbert Wiebe, M.D. (Saskatchewan, 1962).
Associate Clinical Professor: Kenneth A. Podger, M.D. (Duke, 1941).
Assistant Professors: Nels C. Anderson, Ph.D. (Purdue, 1964); Jane E. Brazey, M.D. (Washington Univ. School of Med., 1972); Arnold S. Grandis, M.D. (Duke, 1974); Arthur F. Haney, M.D. (Arizona, 1972); Frederick R. Jelovsek, M.D. (Michigan, 1963); David A. Nagey, M.D. (Duke, 1975); Martin M. Quigley, M.D. (Georgetown, 1971); John F. Steege, M.D. (Yale, 1972); Thomas C. Vaughn, M.D. (Univ. of Texas, Med. Branch, 1974); Selman I. Welt, M.D. (U.N.C. at Chapel Hill, 1972).
Assistant Clinical Professors: James L. Allen, M.D. (Emory, 1965); John V. Arey, M.D. (Harvard, 1946); John R. Ashe, Jr., M.D. (Duke, 1948); Rudy W. Barker, M.D. (U.N.C. at Chapel Hill, 1967); David B. Crosland, M.D. (U.N.C. at Chapel Hill, 1958); Yancy G. Culton, Jr., M.D. (Duke, 1956); Richard E. Lassiter, M.D. (U.N.C. at Chapel Hill, 1965); Donald T. Moore, M.D. (Meharry Med. Coll., 1958); William A. Nebel, M.D. (U.N.C. at Chapel Hill, 1962); Phillip H. Pearce, M.D. (Duke, 1960); Steven M. Scott, M.D. (Indiana, 1974); Robert K. Yowell, M.D. (Duke, 1961).
Associates: Daniel Clarke-Pearson, M.D. (Case, 1975); Linda A. Clayton, M.D. (Duke, 1975); John L. Currie, M.D. (U.N.C. at Chapel Hill, 1967); Wayne S. Maxson, M.D. (Cincinnati Coll. of Med., 1975).
Clinical Associates: Jerry L. Danford, M.D. (Duke, 1967); Michael D. Fried, M.D. (N.Y. Univ. of Med., 1971); Carl A. Furr, Jr., M.D. (U.N.C. at Chapel Hill, 1958); Arned L. Hinshaw, M.D. (Duke, 1964); Clayton J. Jones, M.D. (Tennessee, 1952); Debra A. Kaplan, Ph.D. (Univ. of Pennsylvania, 1977); William R. Lambeth, M.D. (Bowman Gray, 1974); E. Frank Shavender, M.D. (U.N.C. at Chapel Hill, 1968); Joseph A. Stephens, M.D. (Pittsburgh, 1952); Thomas A. Stokes, Jr., M.D. (Duke, 1955); Allen H. VanDyke, M.D. (Bowman Gray, 1971); Gayle S. Vest, M.D. (Univ. of Minnesota, 1974).
Research Associates: M. Anne Brown, A.B. (Salem, 1947); Louise A. Kaufmann, A.B. (U.N.C. at Chapel Hill, 1947); Lawrence D. Kodack, A.B. (U.N.C. at Chapel Hill, 1973); Jeffrey V. May, Ph.D. (U. of Maine, 1970).

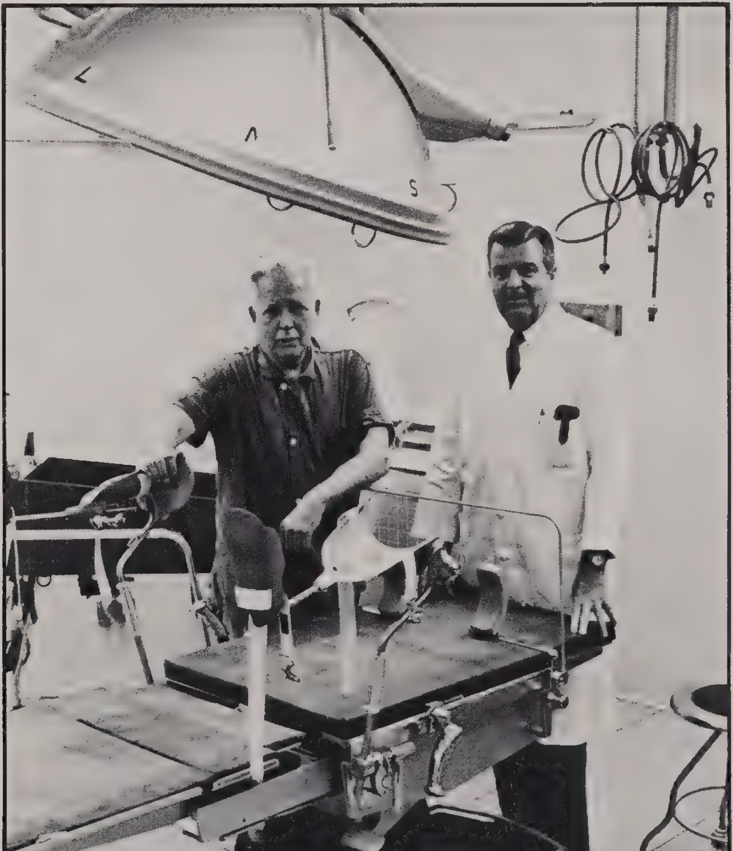
Faculty in March, 1959: Row 1 (L to R): W. Thomas, B. Carter, E. Hamblen, R. Creadick. **Row 2:** T. Robbins, C. Peete, F. DelCorral, V. Turner, W. Cherny, R. Parker.

Roy T. Parker, M.D.



Roy T. Parker, M.D.





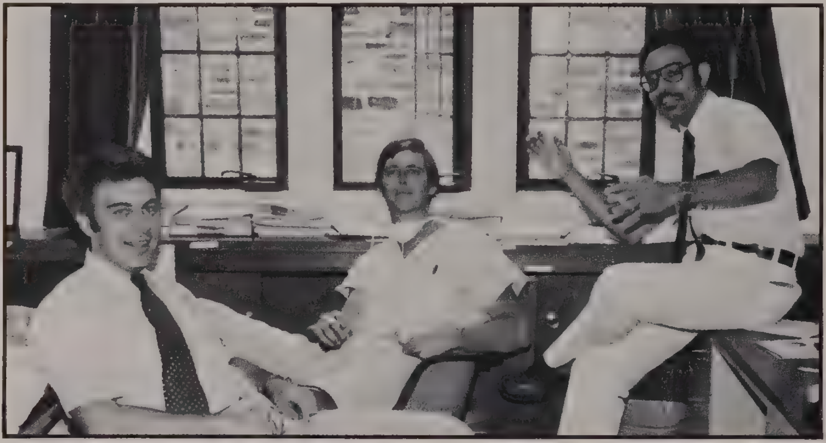
Drs. F. Bayard Carter and Roy T.Parker, dedication of Carter Suite, 1967

OBSTETRICS AND GYNECOLOGY RESIDENTS

Sitting (L to R): G. Sutton, P. Zarutskie, S. Lies, K. Fortier, J. Lane, D. Whitesides. **Standing:** M. Dydek, E. Puleo, S. Hainline, V. Haygood, R. Zern, R. Filker, M. Dudzinski, B. Walls, C. Livengood, K. Trofatter, T. Edwards, J. Garcia, C. Harris, M. Prystowsky, J. Barter, A. Haven, L. Bandy, N. Zornek.

Chief Residents: Kenneth J. Fortier, M.D. (Dartmouth, 1976); John W. Lane, M.D. (Duke, 1972); Stephen C. Lies, M.D. (Duke, 1976); Gregory P. Sutton, M.D. (Michigan, 1976); Daniel B. Whitesides, M.D. (Duke, 1976); Paul W. Zarutskie, M.D. (Hahnemann Med. Coll., 1976).

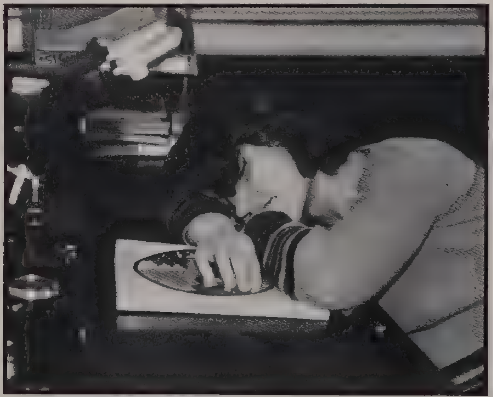
Assistant Residents: Lawrence C. Bandy, M.D. (Duke, 1977); James F. Barter, M.D. (Univ. of Virginia, 1977); Michele R. Dudzinski, M.D. (Boston, 1978); Margaret T. Dydek, M.D. (Duke, 1978); Timothy F. Edwards, M.D. (Bowman Gray, 1978); Rochelle Filker, M.D. (Florida, 1978); José Garcia-Saul, M.D. (Duke, 1977); Sarah W. Hainline, M.D. (Duke, 1978); Charles O. Harris, M.D. (U.N.C. at Chapel Hill, 1979); Andrew Haven, M.D. (U.N.C. at Chapel Hill, 1978); Vanessa Haygood, M.D. (Harvard, 1978); Charles H. Livengood, III, M.D. (Duke, 1976); Ellen T. Puleo, M.D. (Duke, 1979).



Drs. J. Lane, N. Livengood, and C. Harris

M. Prystowsky, M.D.

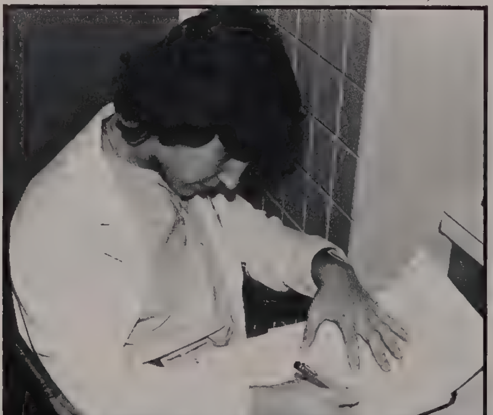
V. Haygood, M.D.



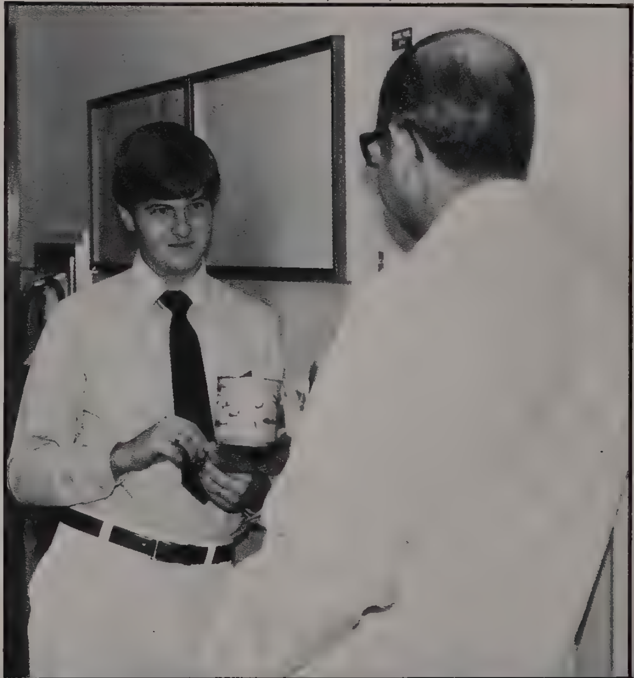
M. Dudzinski, M.D.

E. Puleo, M.D.

M. Dudzinski, M.D.



S. Lies, M.D., and A. Christakos, M.D.



OPHTHALMOLOGY

Robert Machemer, M.D.
Chairman

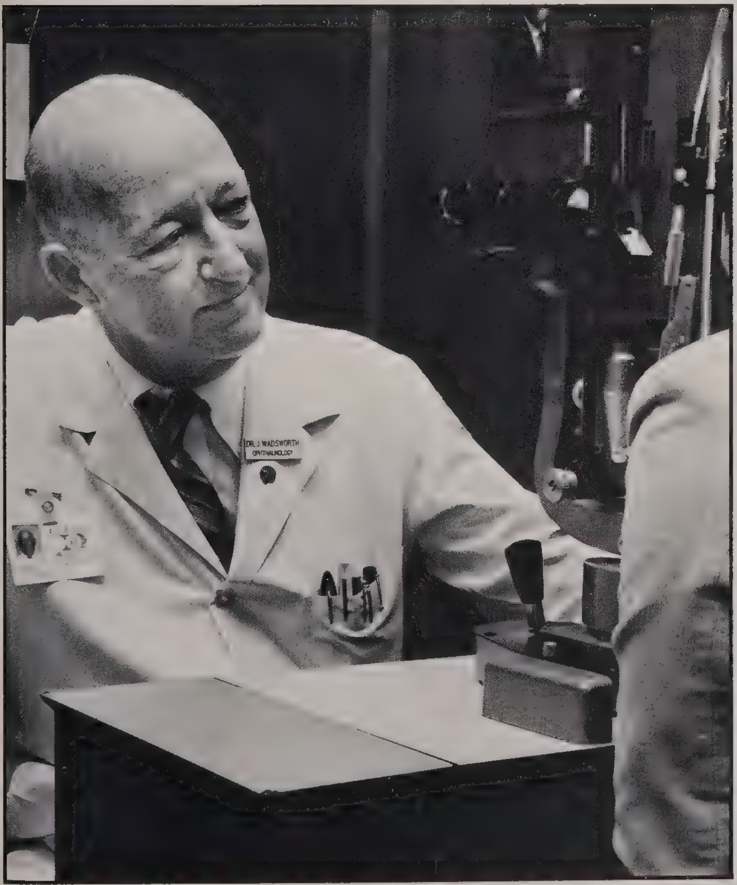
For twenty-three years Ophthalmology was a Division of the Department of Surgery. In 1965 departmental status was granted to Ophthalmology, and Dr. Joseph A.C. Wadsworth was offered the position of Chairman of the newly-formed Department.

During the next few years, the growth of the Department and plans for an Eye Center developed simultaneously. The attending staff was nearly doubled; the residency program was enlarged, and patient referrals continued to climb.

A new building for the Eye Center was planned and with contributions from individuals and private foundations this building became reality. On June 30, 1971, ground breaking took place, and two years later, on August 7, 1973, the Eye Center was opened. The Eye Center is a 3.7 million dollar facility and contains three floors — one for outpatients facilities, one for inpatient care with two operating rooms, and one for research. Until its creation, no comparable facility existed between Miami and Baltimore.

In 1978 Dr. Wadsworth retired from his administrative position as Chairman, and Dr. Robert Machemer, formerly with the Bascom Palmer Eye Institute in Miami, was appointed as the new Chairman.

The objectives of the Department are to provide patient care in all fields of ophthalmology by a group of physicians with specialized areas of interest. Since Dr. Machemer's arrival, more emphasis has been placed on tertiary care because of the ever increasing need for more sophisticated service. Additional faculty members have been added. The teaching program has been enlarged by combining it with the McPherson Hospital, Durham. There has been a significant expansion in the research facilities with addition of scanning and transmission electron microscope laboratories, histology and tissue culture laboratories, and a biophysics laboratory. Research is geared towards the study of vitreo-retinal, corneal and glaucomatous diseases and the development of investigational and surgical instrumentation.

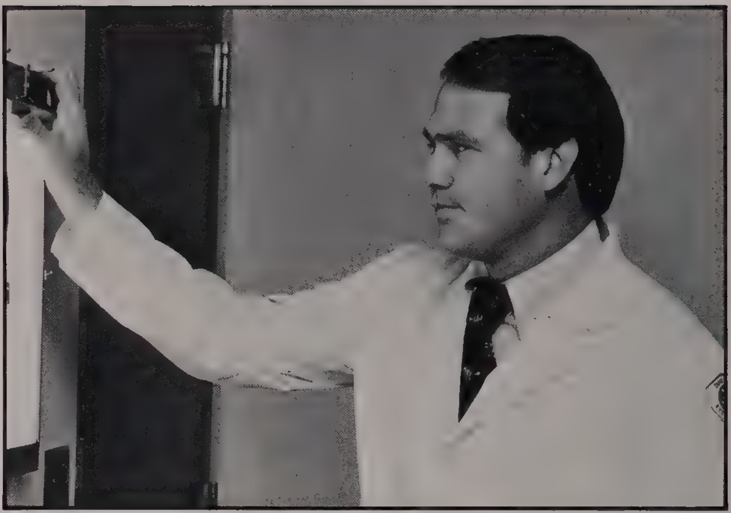


J. A. C. Wadsworth, M.D.

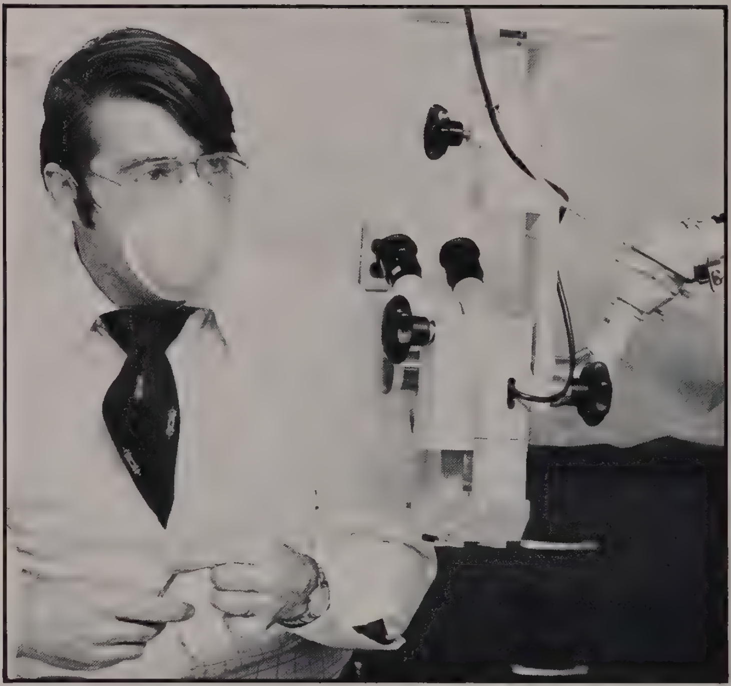
W. B. Anderson, Jr., M.D.

J. A. C. Wadsworth, M.D.

B. Blake and M. B. Landers, III, M.D.



C. F. Sydnor, M.D.



G. N. Foulks, M.D.

OPHTALMOLOGY FACULTY

Row 1 (L to R): A. Chandler, Jr., J. Wadsworth, R. Machemer, J. Seaber. **Row 2:** B. Anderson, Jr., G. Foulks, M. Landers, III, M. Wolbarsht.

Professor: Robert Machemer, M.D. (Freiburg, Germany, 1959), *Chairman*.

Professors: Joseph A. C. Wadsworth, M.D. (Duke, 1939); Myron L. Wolbarsht, Ph.D. (Johns Hopkins, 1958); Maurice B. Landers, III, M.D. (Michigan, 1963); W. Banks Anderson, Jr., M.D. (Harvard, 1956).

Associate Professors: Arthur C. Chandler, Jr., M.D. (Duke, 1959); M. Bruce Shields, M.D. (Oklahoma, 1966).

Assistant Professor: Gary N. Foulks, M.D. (Columbia, 1970).

Assistant Clinical Professors: Judy H. Seaber, B.A. (Emory, 1962); Charles F. Sydnor, M.D. (Virginia, 1969).

Clinical Associates: R. Jeffrey Board, M.D. (Duke, 1974); Robert D. Dawson, M.D. (Meharry, 1943), J. Thomas Foster, M.D. (Duke, 1958); William R. Harris, M.D. (U.N.C. at Chapel Hill, 1956); Edward K. Isbey, Jr., M.D. (Wayne, 1955); Martin J. Kreshon, M.D. (Marquette, 1954); W. Hampton Lefler, M.D. (Bowman Gray, 1963); Samuel D. McPherson, Jr., M.D. (Johns Hopkins, 1943); Edward E. Moore, M.D. (Harvard, 1942); Van B. Noah, M.D. (Bowman Gray, 1966); Marcia O. Rassi, B.A. (Universidade Catolica de Goias, 1974); Harold E. Shaw, Jr., M.D. (Medical University of South Carolina, 1973); John H. Killian, M.D. (Bowman Gray, 1967).

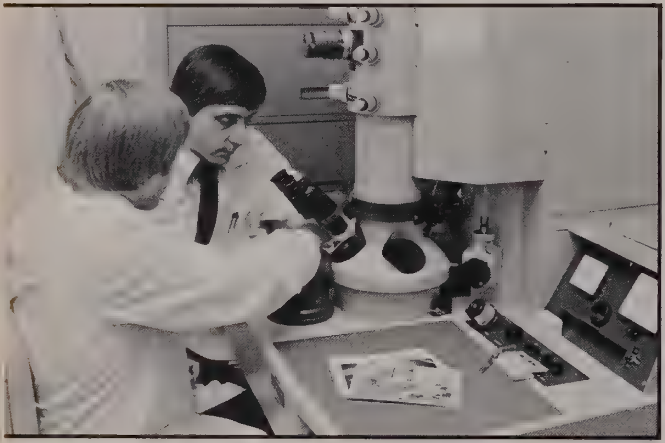
OPHTHALMOLOGY RESIDENTS

Row 1 (L to R): Y. Tano, J. Mitchell, C. Salafia, J. Salisbury, J. Knupp, G. Ellis, Jr., B. McCuen. **Row 2:** S. Gulledge, N. Radtke, E. Buckley, T. Beardsley, S. McCracken, J. Tiedeman, S. Braverman.

Chief Residents on rotating basis.

Residents: Frank H. Christensen, M.D. (St. Louis, 1976); Stanley D. Braverman, M.D. (Miami, 1976); J. Stuart McCracken, M.D. (Duke, 1975); James S. Tiedeman, M.D. (Duke, 1977).

Assistant Residents: Thomas L. Beardsley, M.D. (Duke, 1977); John E. Bourgeois, M.D. (Univ. of Virginia, 1979); Barbara A. Branyon, M.D. (Medical College of Virginia, 1979); Edward G. Buckley, M.D. (Duke, 1977); George S. Ellis, Jr., M.D. (Tulane, 1977); James A. Knupp, M.D. (Ohio, 1978); Christine C. Nelson, M.D. (Univ. of Cincinnati, 1979); James A. Salisbury, M.D. (Tulane, 1977); Howard N. Short, M.D. (St. Louis, 1978); W. L. Gregory Siefert, M.D (Ohio, 1978).



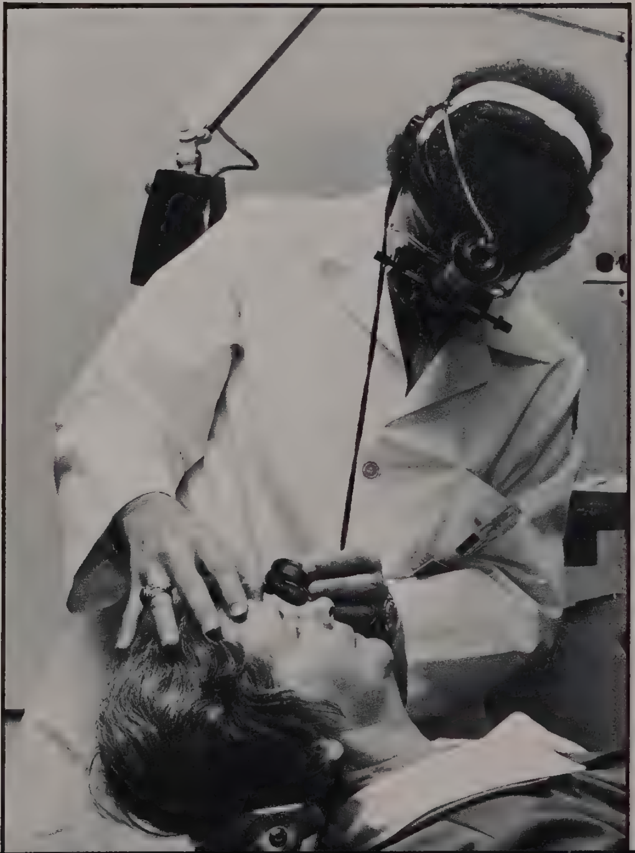
D. Chandler and N. Radke, M.D.

Drs. J. Knupp, B. Shields, E. Buckley, G. Ellis, Jr., J. Mitchell, and S. McCracken

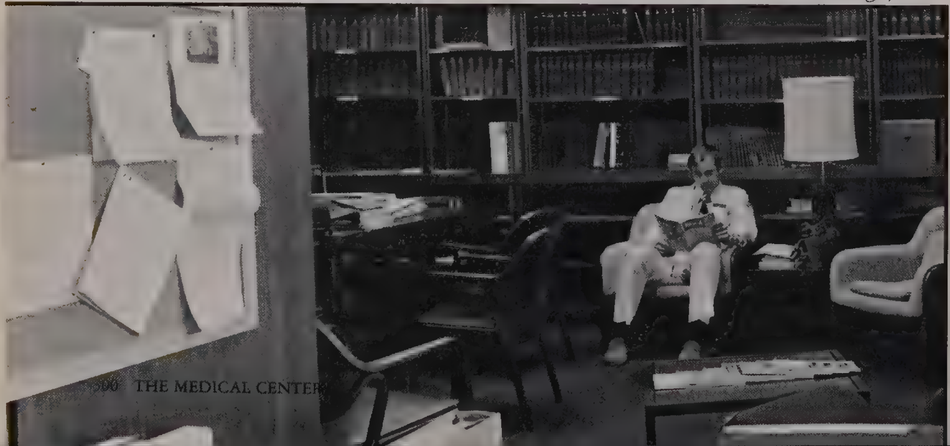
S. Gulledge, M.D., and E. Donnelly, M.D.

W. A. MacIlwaine, IV, M.D

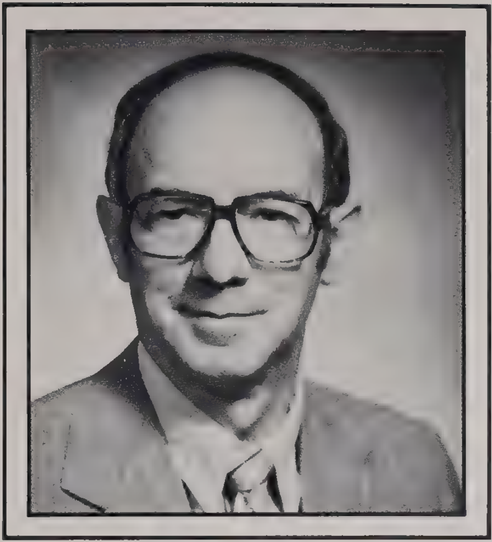
G.S. Ellis, Jr., M.D.



S. L. Gulledge, M.D.



PATHOLOGY



Robert B. Jennings, M.D.
Chairman

The Department of Pathology at Duke University Medical Center began in 1930 with the arrival in Durham of Dr. Wiley D. Forbus as the first Chairman. Dr. Forbus had trained at the Johns Hopkins Hospital with such distinguished professors as William H. Welch and William G. MacCallum from whom he inherited a dedication to classical anatomical pathology. Under Dr. Forbus' influence, the Department at Duke used the autopsy as the principal resource for medical education and the primary tool for the investigation of the nature and causes of human disease. These studies provided much new information, and the byproducts of this dedication to the postmortem examination acrued both to contemporaries of the early department and to students of the latter decades, including those of this semicentennial year.

Dr. Forbus was an advocate of the case method of teaching. Specimens of special interest were preserved in ceramic pots which, by the end of his tenure, filled the halls of the second and third floors of the Davison Building. Although those worn specimens and black and white transparencies which have survived may seem anachronistic in this age of molecular biology, their continued use by students and faculty reaffirms their value.

Dr. Forbus' approach to the study of disease also was preserved in his classic two-volume text *Reaction to Injury* and was passed to others through the thirty professors, fifteen chairmen, and five deans who trained in his department.

By the beginning of the 1960's, both the breadth and depth of medical science had increased greatly and attention now was focused on the ultrastructural and molecular alterations of disease. It was appropriate, therefore, that the second department Chairman, Dr. Thomas D. Kinney, supported the subspecialty approach to anatomic pathology and stimulated a program of basic research, while maintaining the Department's concern for the interests of the medical student.

Dr. Kinney trained and recruited subspecialists in such areas as cardiovascular, renal, immuno-, surgical, pulmonary, hemato-, pediatric, muscle, bone, neuro-, ophthalmic, cyto-, clinical, and dermatopathology, so that the skills of this enlarged department complemented those of the increasingly specialized clinical services. It is a reflection of the climate of the Department that so many of these nationally recognized experts in their fields have resisted offers of Chairs at other institutions, preferring rather to remain in Duke's scholarly environment.

Dr. Kinney's personal interest in research was transmitted to the faculty whose abilities and productivity attracted the funds necessary for the investigations of ultrastructure, cell biology, virology, immunology, biomathematics, toxicology, and chemical pathology.

The Department under Dr. Kinney had a lasting commitment to the needs of the student. Its teaching responsibilities were expanded in concert with demands of the reformed medical curiculum of 1966. The introductory course in pathology was redesigned in light of contemporary concepts, and subspecialty courses were established which have remained so popular with third year students. A program in graduate education in Pathology was begun.

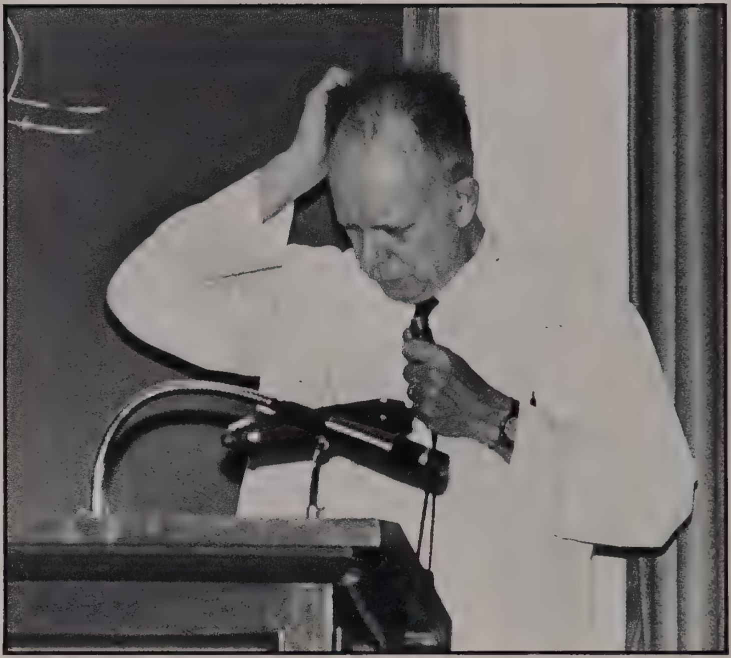
Under the leadership of its present chairman, Dr. Robert B. Jennings, the Department has retained its subspecialty orientation toward diagnostic pathology and has supplemented its core of experienced faculty members with new appointments in such fields as immunopathology, renal pathology, clinical pathology, cardiovascular pathology, hematopathology, endocrine pathology, gastrointestinal pathology, cytopathology, and surgical pathology. Clinical pathology at Duke Hospital was better defined as an entity in 1978 and became a Division of Hospital Laboratories under the direction of Dr. Kenneth Schneider. The Department of Pathology is closely affiliated with this new division and supplies faculty members with special interests in the increasingly sophisticated discipline of laboratory medicine.

Active involvement in basic research continues and has been expanded by appointments of investigators with interests in ischemia, computer models of disease, immunology, viral and chemical carcinogenesis, immunogenetics, oncology, thrombosis, and molecular pathology. These and other individuals in the Department successfully compete for funding and prestige at the national level.

The present Department's enthusiastic commitment to the education of medical students is apparent in both the quantity and quality of course offerings. More students elect pathology courses than those of any other basic science, and in four of the last five years faculty members of the Pathology Department have been honored by receipt of the students' Golden Apple Award as best teacher in the basic science category. It is not surprising that Duke's recruitment of medical students into

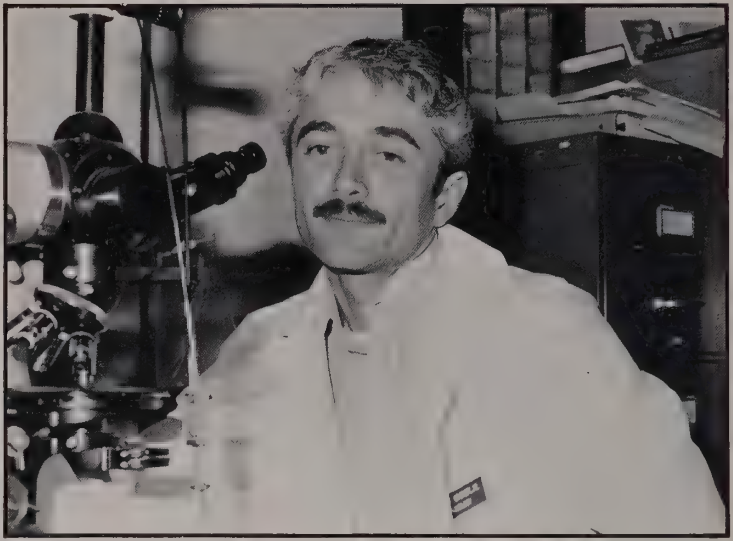
Drs. J. Shelburne, P. Pratt, E. Bossen, and J. Sommer pathology careers occurs at twice the national rate. The training of pathology residents is also an important goal. The eight house staff positions are coveted by over one hundred applicants. In a rigorous training program, the residents are prepared, in approximately equal numbers, for careers in either academic medicine or the private practice of pathology.

In its fifty years, the faculty of the Department of Pathology of Duke University Medical Center has increased from one professor in 1930 to thirty-six full-time senior staff members in 1980. In addition, there are thirty residents, five fellows, and twenty-one graduate students. This department continues to strive to maintain the difficult balance between a high level of diagnostic skill, meaningful basic research, and a whole-hearted commitment to teaching. By all objective measures it excels in all of these endeavors and enthusiastically enters its second fifty years.



B. F. Fetter, M.D.

R. E. Ideker, M.D., and B. Woodard, M.D.



B. P. Croker, M.D., Ph.D.

PATHOLOGY FACULTY

Row 1 (L to R): C. Daniels W. Bradford, G. Klintworth, R. Jennings, P. Burger, F. Widmann. **Row 2:** P. Pratt, F. Sanfilippo, J. Sommer, E. Bossen, S. Bigner, C. Tisher. **Row 3:** J. Koepke, B. Wittels, D. Adams, D. Graham, J. Shelburne, B. Croker. **Row 4:** R. Farnham, R. Ideker, W. Johnston, S. Pizzo, K. Reimer, K. McCarty, Jr.

Professor: Robert B. Jennings, M.D. (Northwestern, 1950), *Chairman.*

Professors: Darell D. Bigner, M.D. (Duke, 1965), Ph.D. (Duke, 1971); Bernard F. Fetter, M.D. (Duke, 1944); Donald B. Hackel, M.D. (Harvard, 1946); William W. Johnston, M.D. (Duke, 1959); Gordan K. Klintworth, M.D. (Univ. of Witwatersrand, 1957); Ph.D. (Univ. of Witwatersrand, South Africa, 1966); John A. Koepke, M.D. (Univ. of Wisconsin, 1956); Philip C. Pratt, M.D. (Johns Hopkins, 1944); Kenneth A. Schneider, M.D. (Northwestern, 1959); Joachim R. Sommer, M.D. (Munich, 1959); F. Stephen Vogel, M.D. (Western Reserve, 1944); Benjamin Wittels, M.D. (Minnesota, 1952).

Adjunct Professor: Paul Nettesheim, M.D., D.M.S. (Bonn, West Germany, 1959).

Associate Professors: Dolph O. Adams, M.D. (Med. Coll. of Georgia, 1965); Ph.D. (U.N.C. at Chapel Hill, 1972); Edward H. Bossen, M.D. (Duke, 1965); William D. Bradford, M.D. (Western Reserve, 1958); Peter C. Burger, M.D. (Northwestern, 1966); Charles A. Daniels, M.D. (Vanderbilt, 1966), Ph.D. (Duke, 1971); Jane G. Elchlepp, M.D. (Chicago, 1955), Ph.D. (Iowa, 1948); John D. Shelburne, M.D., PH.D., (Duke, 1972); Frances King Widmann, M.D. (Case Western Reserve, 1960); Peter Zwadyk, Ph.D. (Iowa, 1971).

Adjunct Associate Professors: John A. Moore, D.V.M. (Michigan State, (1963); James A. Swenberg, D.V.M. (Minnesota, 1966), Ph.D. (Ohio, 1970).

Associate Clinical Professor: Doyle G. Graham, M.D. (Duke, 1966), Ph.D. (Duke, 1971).

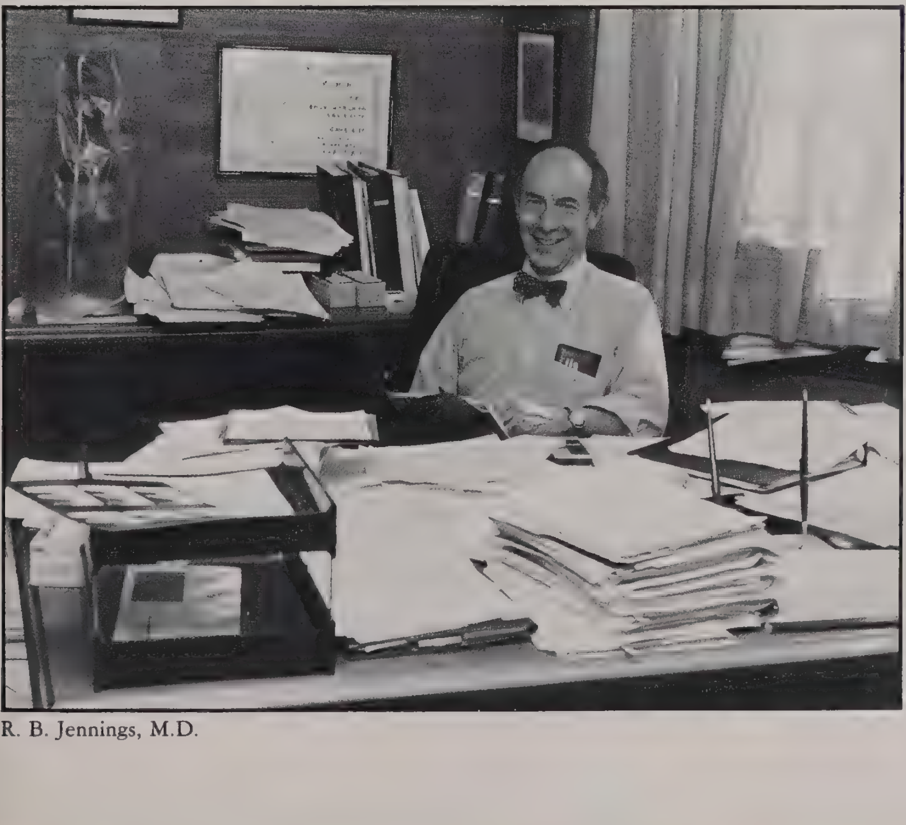
Assistant Professors: Sandra H. Bigner, M.D. (Tennessee, 1971); Byron P. Croker, M.D., Ph.D. (Duke, 1971); Robert Farnham, M.D. (Pennsylvania, 1973); Jane T. Gaede, M.D. (Duke, 1966); Raymond E. Ideker, M.D. (Tennessee, 1974), Ph.D. (Tennessee, 1972); Kenneth McCarty, Jr., M.D. (Duke, 1972); Ph.D. (Duke, 1973); George Michalopoulos, M.D. (Athens, 1969); Ph.D. (Wisconsin, 1977); Salvatore Pizzo, M.D. (Duke, 1972), Ph.D. (Duke, 1973); Keith A. Reimer, M.D. (Northwestern, 1972), Ph.D. (Northwestern, 1971); Alfred Sanfilippo, Ph.D. (Duke, 1975), Ph.D. (Duke, 1976); Frank A. Sedor, Ph.D. (Florida, 1971); Robin T. Vollmer, M.D. (Duke, 1967).

Assistant Medical Research Professor: Carol W. Lewis, Ph.D. (U.N.C. at Chapel Hill, 1972).

Adjunct Assistant Professors: Peter H. Anderson, Ph.D. (Oregon, 1972); Arnold R. Brody, Ph.D. (Colorado, 1969); Donald F. Calbreath, Ph.D. (Ohio, 1968); Ralph C. McCoy, M.D. (Emory, 1967).

Associates: Patricia Ruth Ashton, A.B. (Goucher, 1963); Kenneth R. Broda, Ph.D. (Duke, 1977); J.E. Phillip Pickett, H.T.; Margaret C. Schmidt, M.A. (Louisville, 1969).

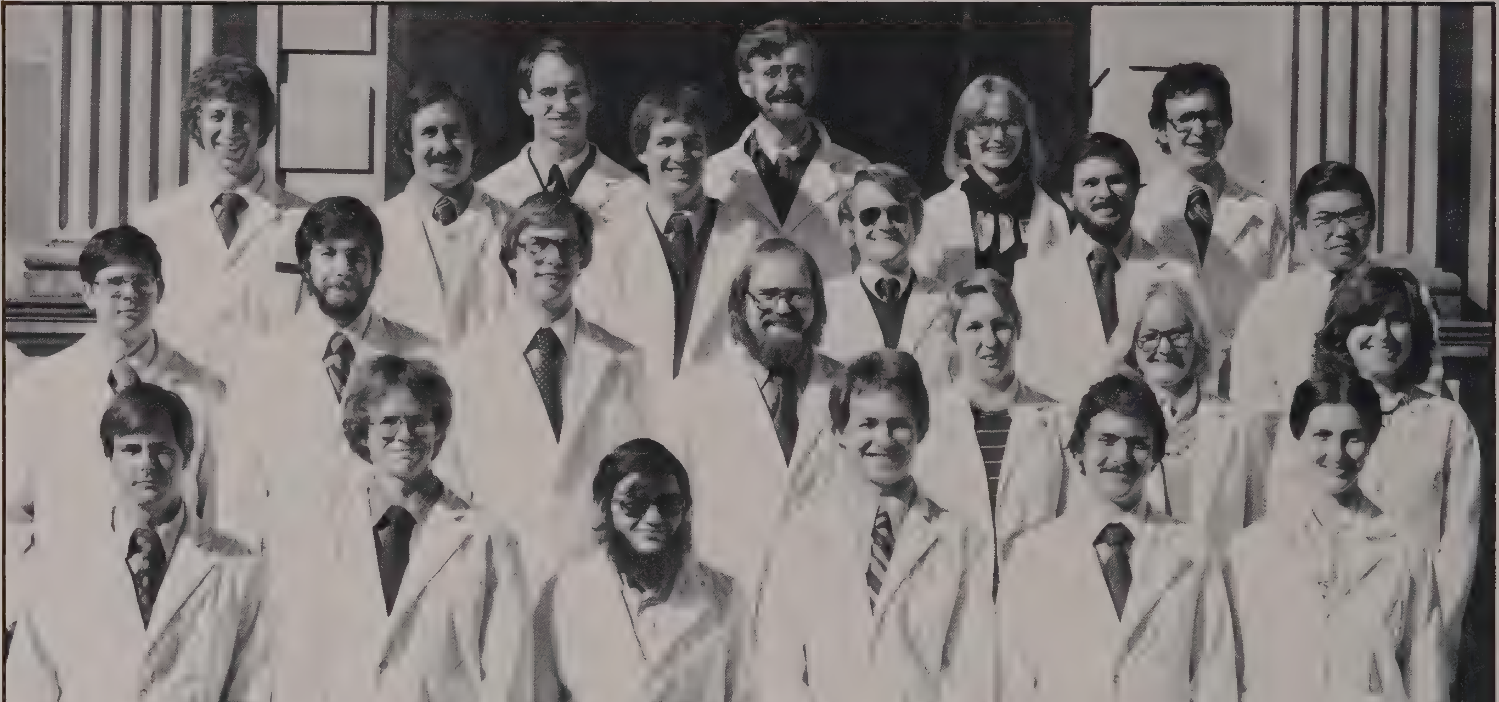
Research Associates: Mary LuSan Hill, B.S. (Webster, 1962); Liesolette Kemper (Berlin Coll.); Ann Lefurgey, Ph.D. (U.N.C. at Chapel Hill, 1976); Eileen Mikat, Ph.D. (Duke, 1979); Richard Serano, M.D. (Virginia, 1973).



R. B. Jennings, M.D.

R. P. McComb, M.D., and F. S. Vogel, M.D.

PATHOLOGY RESIDENTS

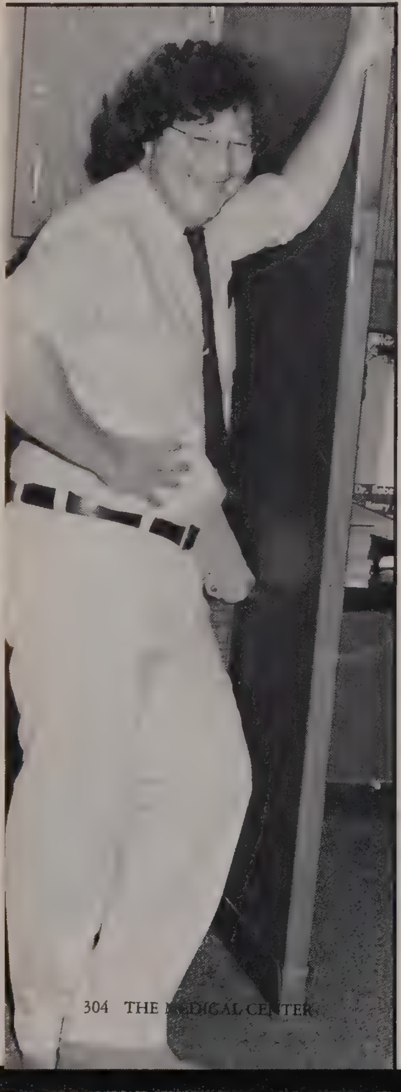


Row 1 (L to R): T. Barton, J. Edgar, M. Shifman, W. Bell, M. Rohlfing, C. Hamilton. **Row 2:** D. Ose, K. Widder, R. McComb, R. Trapasso, M. Bryan, C. Szpak, B. Myers. **Row 3:** R. Stein, T. Mattison, J. Mossler, K. Piech, A. Tatum, S. Ohkawa. **Row 4:** H. Marrow, C. Wisseman, B. Crain, M. Borowitz.

Residents: Thomas K. Barton, M.D. (Duke, 1976); William Bell, M.D. (Duke, 1978); Michael J. Borowitz, M.D., Ph.D. (Duke, 1977); J. Hartley Bowen, M.D. (Jefferson, 1977); Martha C. Bryan, M.D. (Med. Univ. of South Carolina, 1976); Dorwyn W. Croom, M.D. (Washington Univ., 1976); Eric L. Decker, M.D. (Rochester, 1978); William H. Gibson, M.D. (Duke, 1977); Cornelia W. Hamilton, M.D. (Michigan, 1974); Hannah Kinney, M.D. (Case Western Reserve, 1974); Steven E. Levine, M.D. (Indiana, 1978); Thomas R. Mattison, M.D. (Southwestern, 1976); Jeffrey A. Mossler, M.D. (Indiana, 1977); Beverly J. Myers, M.D. (Duke, 1977); Kenneth S. Piech, M.D. (Duke, 1976); Michael B. Rohlfing, M.D. (Illinois, 1977); Mark A. Shifman, M.D. (Med. Coll. of Ohio, 1978); Cheryl A. Spzak, M.D. (Southwestern, 1977); Arthur H. Tatum, M.D. (Duke, 1977), Ph.D. (Duke, 1976); Robert L. Trapasso, M.D. (New York at Syracuse, 1970), Ph.D. (Duke, 1976); Kenneth Widder, M.D. (Northwestern, 1979); Charles L. Wisseman, M.D. (Pennsylvania, 1975).

Fellows: Isaac A. Craig, M.D. (U.N.C. at Chapel Hill, 1968); Andrew Kligerman, Ph.D. (Cornell, 1977); Rodney P. McComb, M.D. (Rochester, 1976); Stephen Strom, Ph.D. (Kansas, 1978).

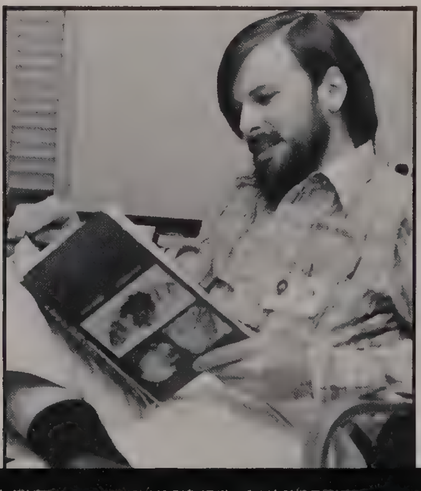
E. L. Decker, M.D.



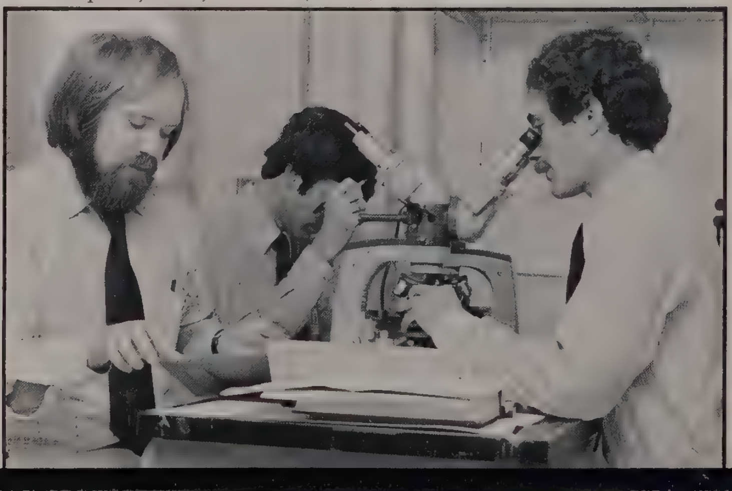
W. H. Gibson, M.D.

K. Widder, M.D.

A. H. Tatum, M.D.



R. L. Trapasso, M.D., L. Bowen, M.D., and S.E. Levine, M.D.



PEDIATRICS

Samuel L. Katz, M.D.
Chairman

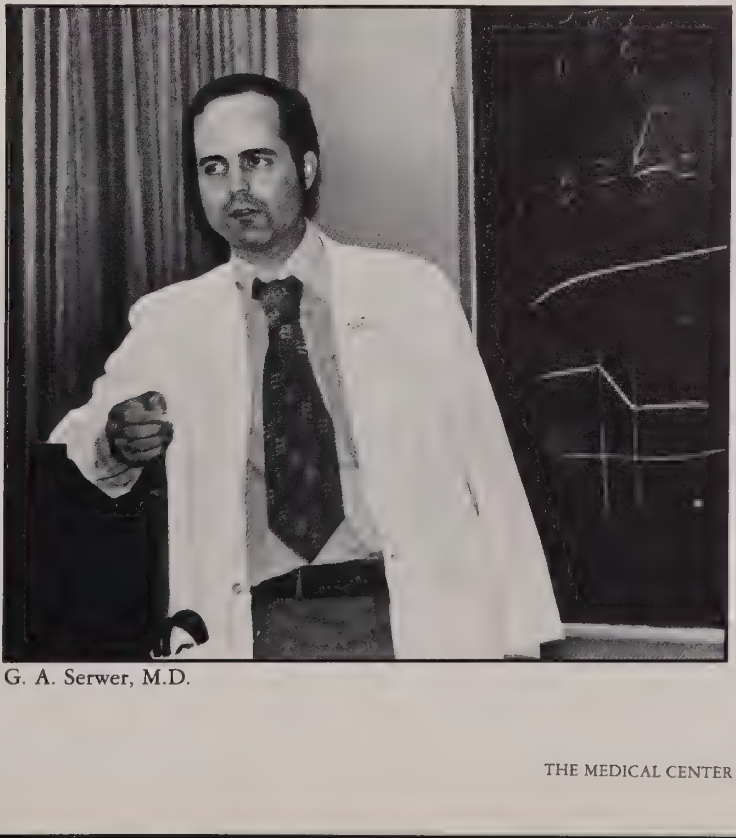
Duke's Department of Pediatrics serves as a focus for the care of infants, children and adolescents. To foster our goals of education, research and service of the highest quality, there is an unceasing effort to deliver patient care at an exemplary level and to fulfill a Departmental role of child advocacy. Close integration with other clinical departments is an important component of all our patient care programs. Similar collaborations with the basic biologic science departments are equally essential for the progress and productivity of our laboratory research programs. The Department functions with nine divisions — General Pediatrics, Neonatology, Endocrinology/Metabolism, Hematology/Oncology, Infectious Diseases, Nephrology, Neurology, Cardiology, and Allergy/Immunology/Pulmonary. Through this divisional structure the Department carries out its varied roles in patient care, teaching and research. Many learners utilize the facilities, faculty and patients of the Department in their educational programs. These include medical students, interns and residents, fellows, graduate students, physician's associates, nursing students, and many others whose interests focus on pediatrics. The medical students, residents and fellows are assigned the highest priority for faculty teaching. Since 1969 seven of eleven "Golden Apples," voted annually by Duke Medical Students for outstanding clinical teaching, have been awarded to faculty members of the Department of Pediatrics.

In addition to its programs of child care located within the Duke Medical Center, the Department conducts outreach programs at sites including Lincoln Community Health Center, Durham County General Hospital, Fayetteville Area Health Education Center, Cabarrus Memorial Hospital, and five northern counties with health resources which have been inadequate to meet the needs of their childhood population. These outreach activities are coupled with educational programs to develop local health personnel who work with Duke residents and faculty. The Duke Pediatrics educational curriculum also involves a longitudinal experience with the Durham County School System for each resident.

Clinical and laboratory research are essential components of the Departmental program. More than two-thirds of our faculty have been awarded research grants and/or contracts from extramural agencies such as the National Institutes of Health, the National Foundation March of Dimes, The Robert Wood Johnson Foundation, the Cystic Fibrosis Foundation, the Heart Association, the North Carolina Department of Human Resources and other similar groups. Faculty members publish the results of their clinical and laboratory studies in scientific journals and also in sections and chapters of standard medical textbooks. Members of the Department are also active in national medical-scientific societies, advisory groups to the National Institutes of Health and Center for Disease Control, editorial boards of journals, and other related research and educational functions.

With the guidance of Departmental faculty, more than fifteen per cent of Duke Medical School graduates have chosen annually to embark on pediatric residency training. With the advice and support of the Department, these students have secured residencies at the top programs in this country, where they have done well in their postdoctoral experiences. At the same time, the twelve first year residency positions in Pediatrics at Duke are sought eagerly each year by hundreds of applicants from medical schools throughout the U.S.A. and Canada. Graduates of the program have been divided fairly equally in their career choices, either focusing on the practice of pediatrics or on academic careers in the field. Each of the Departmental divisions offers fellowship training beyond the residency level. Currently the Departmental roster includes forty faculty members, thirty-four residents, and nineteen fellows.

The history of Duke's Department of Pediatrics begins at the very outset of the medical school itself because Dean Wilburt C. Davison was, in addition to being the "founding father," also the Chairman of the Department of Pediatrics. In its fifty year history there have been three chairmen: Dean Davison (1930-1954), Professor Jerome S. Harris (1954-1968), and Professor Samuel L. Katz (1968-present). In its early years the Department depended heavily on members of the community who both practiced pediatrics and taught at the Medical Center. These included Angus McBryde, Arthur London, and Jay Arena. This tradition has continued to the present with a harmonious and active interface between the practicing pediatricians of the community and the full-time faculty of the Department. Many of the pediatricians who practice in Durham received



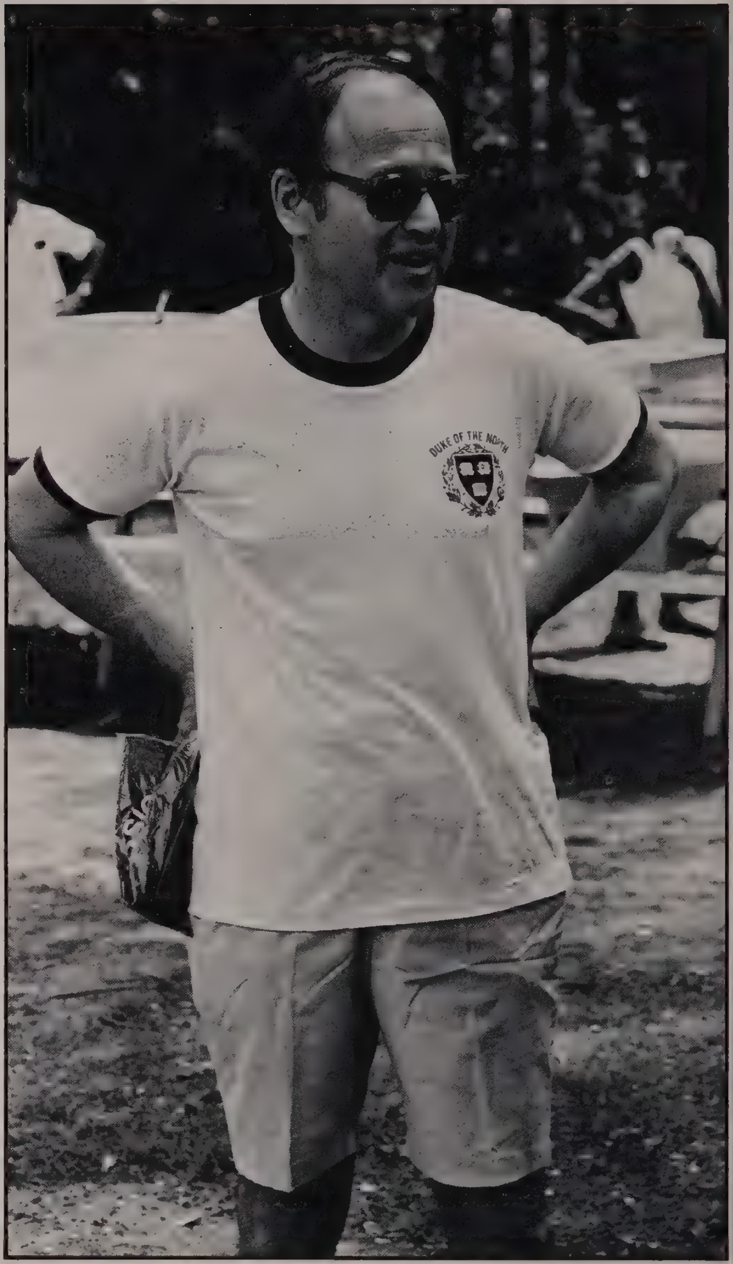
G. A. Serwer, M.D.

their training at Duke, and they continue to serve as teachers in the Duke clinics, on the wards and nurseries, at Durham County General Hospital and in their offices.

The Department has historically served as a hospitable and productive environment for women seeking careers in medicine. Dr. Susan Dees joined the faculty as one of the earliest female members and rapidly emerged as a national and international leader in the developing field of Pediatric Allergy. One of her students, Dr. Rebecca Buckley, has become the first woman President of the American Academy of Allergy while establishing her international reputation as a leader in research in Pediatric Immunology. Drs. Beverly Morgan and Doris Howell have left Duke to become Department chairpersons at distinguished American universities. Among current faculty, Drs. Lillian Blackmon, Shirley Osterhout, Laura Gutman, and Catherine Wilfert have achieved national stature for their contributions to their respective fields.

Since its inception, programs initiated by the Department of Pediatrics have gained national recognition. Among these are the Poison Control movement, initiated at Duke by Dr. Jay Arena, the development of Pediatric Allergy by Dr. Dees, the program in Pediatric Cardiology started by Dr. Jerome Harris with Dr. Madison S. Spach, Dr. James Sidbury's pioneering research in the study of glycogen storage disease, Dr. Alexander Spock's work in cystic fibrosis, research on cytomegalovirus by Dr. David Lang, research and community organization in the care of the premature infant by Dr. George Brumley, Dr. Rebecca Buckley's studies and treatment of children with immune deficiency syndromes, and leadership in the field of immunization by Dr. Samuel L. Katz.

With the completion of its first half century, the Department of Pediatrics has moved its inpatient services from Duke South to an exciting new Fifth Floor Children's Unit in the modern new Duke North Building. There the facilities for optimal care of infants, children and adolescents have been constructed to enable us to continue into the next fifty years as leaders providing the highest standard of pediatric care.



S. L. Katz, M.D.

PEDIATRIC FACULTY

Row 1 (L to R): T. Frothingham, K. Cheung, B. Armstrong, S. Katz, M. Vernon, D. Kredich, J. Brazy, R. Faix. **Row 2:** P. English, G. Brumley, V. Little, J. Schulman, B. Lipman, G. Serwer, S. Gross. **Row 3:** D. Lang, S. Osofsky, L. Gutman, J. Falletta, T. Kinney, R. Sterba, M. Herman-Giddens. **Row 4:** D. Lewis, P. Gallagher, R. Buckley, L. Backmon, G. Woods.

Wilburt C. Davison Professor: Samuel L. Katz, M.D. (Harvard, 1952), *Chairman.*

Professors Emeritus: Jay M. Arena, M.D. (Duke, 1932); Susan C. Dees, M.D. (Johns Hopkins, 1934); James B. Sidbury Professor Jerome S. Harris, M.D. (Harvard, 1933).

Professors: George W. Brumley, M.D. (Duke, 1960); James B. Sidbury Professor Rebecca H. Buckley, M.D. (U.N.C. at Chapel Hill, 1958); Thomas E. Frothingham, M.D. (Harvard, 1951); Herman Grossman, M.D. (Columbia, 1953); David J. Lang, M.D. (Harvard, 1958); James B. Sidbury, Jr., M.D. (Columbia, 1947); Madison S. Spach, M.D. (Duke, 1964); Alexander Spock, M.D. (Maryland, 1955); Catherine M. Wilfert, M.D. (Harvard, 1962).

Associate Professors: Page A. W. Anderson, M.D. (Duke, 1963); Roger C. Barr, Ph.D. (Duke, 1968); Lillian Blackmon, M.D. (Arkansas, 1963); M. Carlyle Crenshaw, M.D. (Duke, 1956); John M. Falletta, M.D. (Kansas, 1966); Howard Filston, M.D. (Western Reserve, 1962); Laura T. Gutman, M.D. (Stanford, 1963); Stuart Handwerger, M.D. (Maryland, 1964); David F. Merten, M.D. (Cincinnati, 1956); Charles R. Roe, M.D. (Duke, 1964); Stanley J. Rothman, M.D. (McGill, 1965).

Assistant Professors: Brenda E. Armstrong, M.D. (St. Louis, 1974); D. Woodrow Benson, M.D., Ph.D. (Duke, 1972); William D. Bradford, M.D. (Western Reserve, 1958); Jane E. Brazy, M.D. (Washington Univ., 1972); Rosalind Coleman, M.D. (Western Reserve, 1969); Peter C. English, M.D., Ph.D. (Duke, 1975); John A. Fowler, M.D. (Bowman Gray, 1946); Stephen Gehlbach, M.D. (Western Reserve, 1968); Steven Gross, M.D. (Maryland, 1973); Seymour Grufferman, M.D. (State Univ. of New York, Syracuse, 1964); Harold J. Harris, M.D. (Long Island Coll. of Med., Brooklyn, 1949); Robert H. Hock, Ph.D. (Miami, 1976); Ziad H. Idriss, M.D. (Amer. Univ. of Beirut, Lebanon, 1970); J. David Jones, M.D. (Duke, 1954); Sue Y.S. Kimm, M.D. (Yale, 1964); Thomas R. Kinney, M.D. (Duke, 1970); Deborah W. Kredich, M.D. (Michigan, 1962); Darrell V. Lewis, M.D. (Minnesota, 1969); Mary Ann Morris, M.D. (Arkansas, 1972); Aglaia N. O'Quinn, M.D. (Duke, 1965); Stephen G. Osofsky, M.D. (Northwestern, 1969); Shirley K. Osterhout, M.D. (Duke, 1957); Talmage Peele, M.D. (Duke, 1934); M. Henderson Rourk, Jr., M.D. (Pennsylvania, 1963); Gerald A. Serwer, M.D. (Duke, 1971); Raymond A. Sturner, M.D. (Georgetown, 1968); Robert J. Thompson, Jr., Ph.D. (North Dakota, 1971); Joyce Wise, M.D. (Illinois, 1973); Kwan-Sa You, Ph.D. (Brandeis, 1971).

Associates: Ann R. Cantor, M.D. (California at San Francisco, 1971); Joanna S. Dalldorf, M.D. (Cornell, 1958); Paula DeRemer, Ph.D. (Purdue, 1978); Donald R. Kirks, M.D. (Washington Univ., 1968); Robert Ruderman, M.D. (Rochester, 1968); Richard Sterba, M.D. (Ohio State, 1974).

Consultant and Lecturer: Angus M. McBryde, M.D. (Pennsylvania, 1928).

Clinical Professor: William J. A. DeMaria, M.D. (Duke, 1948).

Associate Clinical Professors: William L. London, M.D. (U.N.C. at Chapel Hill, 1955); George M. Lyon, Jr., M.D. (Duke, 1961); A.W. Renuart III, M.D. (Duke, 1955); Evelyn Schmidt, M.D. (Duke, 1951); Bailey D. Webb, M.D. (Duke, 1946), Ph.D. (U.N.C. at Chapel Hill, 1941).

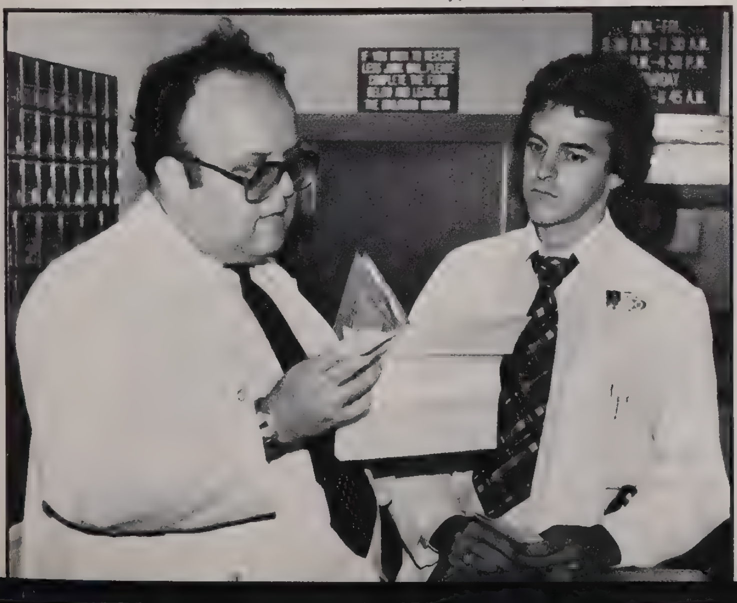
Assistant Clinical Professors: Clarence Bailey, M.D. (U.N.C. at Chapel Hill, 1955); Stephen Brown, M.D. (Harvard, 1966); William A. Cleland, M.D. (Howard, 1933); James S. Hall, M.D. (Duke, 1957); Alvin H. Hartness, M.D. (Bowman Gray, 1965); Richard S. Kelly, Jr., M.D. (Jefferson, 1945); Howard H. Loughlin, M.D. (Pennsylvania, 1970); Thomas M. McCutchen, M.D. (Vanderbilt, 1963); Nelle S. Moseley, M.D. (Med. Coll. of Georgia, 1957); Charles B. Neal, M.D. (Duke, 1955); John C. Pollard, M.D. (Virginia, 1968); William C. Powell, M.D. (Bowman Gray, 1952); Jimmie L. Rhyne, M.D. (Maryland, 1948); A. Douglas Rice, M.D. (Duke, 1951); Robert J. Senior, M.D. (Jefferson, 1955); Frank S. Shaw, M.D. (Pennsylvania, 1959); Charles I. Sheaffer, M.D. (Western Reserve, 1958); S. Winston Singleton, M.B. (Manchester, England, 1952); Fred R. Stowe, M.D. (U.N.C. at Chapel Hill, 1958); W. Samuel Yancy, M.D. (Duke 1965).

Clincial Associates: Lillis Altshuller, M.D. (Cincinnati, 1960); Joanne Barton, M.Sc. (Kentucky, 1974); Elizabeth Burkett, M.S.N. (U.N.C. at Chapel Hill, 1975); Mary Jane Burns, M.S.N. (U.N.C. at Chapel Hill 1974); Dennis A. Clements, M.D. (Rochester, 1973); Meade R. Christian, Jr., M.D. (Western Reserve, 1967); William G. Conley, M.D. (Med. Coll. of Virginia, 1960); W. LaDell Douglas, M.D. (Georgetown, 1974); Jeane Findlay, M.B. (Aberdeen Univ. Med. Sch. Scotland, 1970); Rufus McP. Herring, Jr., M.D. (Bowman Gray, 1969); Pierre Le Master, M.D. (Florida, 1971); Jerri Oehler, M.S.N. (Virginia, 1970); James B. Rouse, M.D. (Duke, 1965); Janice Stratton, M.D. (Tulane, 1961); Joseph Whatley, Jr., M.D. (Duke, 1958).

Research Associates: Dianne Y. Bell, Ph.D. (North Carolina State, 1976); Victor German, M.D. (Pritzker, 1975); Ph.D. (Illinois, 1963).

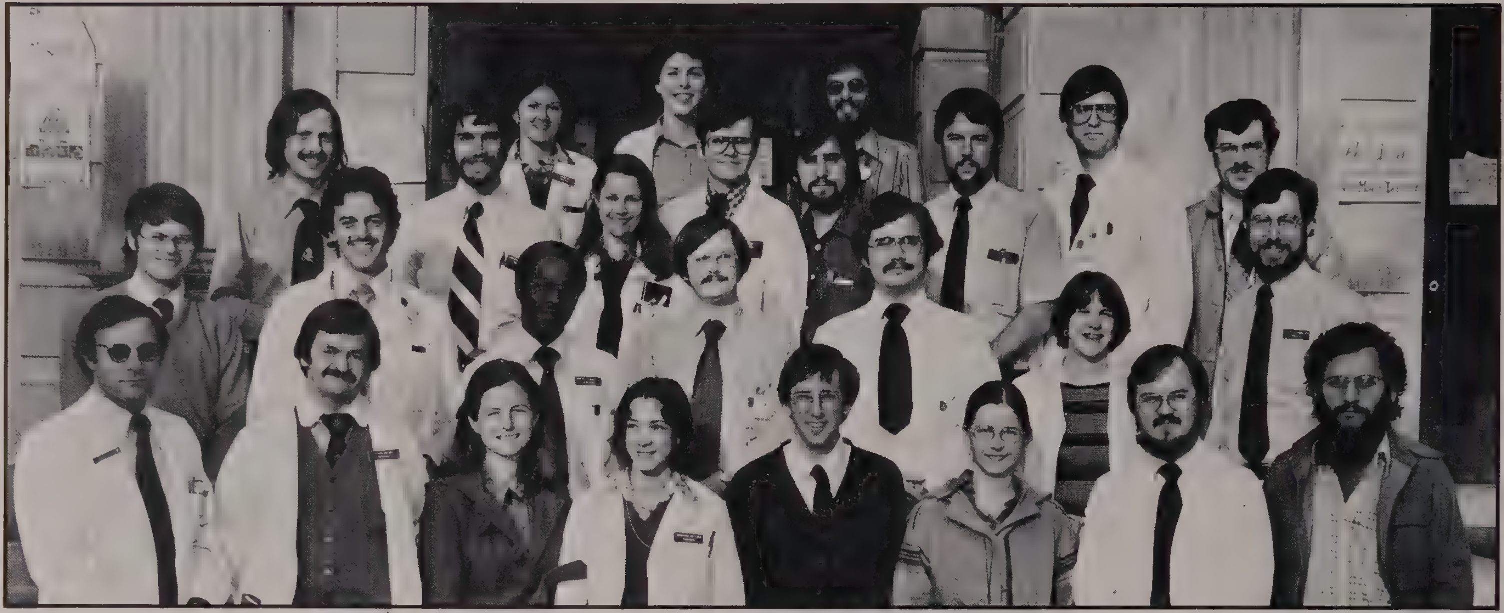
Assistant Medical Research Professors: Patricia Baker, Ph.D. (Illinois, 1975); Kwok-Sing Cheung, Ph.D. (Saskatchewan, Canada, 1971); Stephen R. Turner, Ph.D. (Duke, 1971).

S. Osofsky, M.D., and D. Watson, P.A.



G. Woods, M.D., and R. Ettinger, M.D

PEDIATRIC RESIDENTS


Row 1 (L to R): W. Coleman, J. Duncan, C. Ingold, C. Hift, R. McKinney, P. Cannon, C. Joiner, T. Durr. **Row 2:** W. Thorpe, D. Watson, M. Dixon, L. Williams, B. Murdock, S. Lehrman, L. Fahrner. **Row 3:** F. Ritter, C. Miller, S. Becker, L. Key, R. Ettinger, M. Ruff, J. Cramer, R. Warren. **Row 4:** D. Squire, D. O'Brien, B. Myones.

Fellows: John D. Bray, M.D. (Miami, 1977); Ann C. Dunnigan, M.D. (Duke, 1977); Robert S. Ettinger, M.D. (Maryland, 1976); Roger G. Faix, M.D. (Cornell, 1975); Philip E. Gallagher, M.D. (Pittsburgh, 1976); William J. Greeley, M.D. (Texas at Houston, 1976); Alan P. Knutsen, M.D. (St. Louis, 1975); Sandra N. Lehrman, M.D. (Brown, 1976); Brian Lipman, M.D. (Witwatersrand, Johannesburg, Republic of South Africa, 1972); Virginia A. Little, M.D. (Alabama, 1975); Barbara A. Miller, M.D. (Penn. State, 1976); Hugh A. Sampson, M.D. (N.Y. at Buffalo, 1975); Joseph Schulman, M.D. (Pennsylvania, 1975); L. Reed Shirley, M.D. (Vanderbilt, 1976); Corry D. Sibrack, M.D. (Michigan State, 1976); Mary L. Vernon, M.D. (Columbia, 1976); Gerald M. Woods, M.D. (Duke, 1976); Gordon Worley, M.D. (Harvard, 1973).

Third Year Residents: Patricia A. Cannon, M.D. (Duke, 1977); Faith B. Crosby, M.D. (Med. Col. South Carolina, 1977); John A. Duncan, M.D. (South Florida, 1977); Thomas E. Durr, M.D. (Johns Hopkins, 1977); Gail H. Gallemore, M.D. (Duke, 1977); Larry C. Harris, M.D. (Duke, 1977); Lyndon Key, Jr., M.D. (North Carolina at Chapel Hill, 1977); Linda J. Murphy, M.D. (Rochester, 1977); Barry L. Myones, M.D. (Albany, 1977); David Sherry, M.D. (Texas Tech., 1977); Larry Williams (Duke, 1977).

Second Year Residents: Sandra J. Becker, M.D. (Texas, Southwestern, 1977); Yuan-Tsong Chen, M.D., Ph.D. (National Taiwan Univ., 1973); Joseph G. Cramer, M.D. (Arizona, 1977); M. Pamela Griffin, M.D. (Mississippi, 1978); Christina M. Hift, M.D. (Albert Einstein, 1978); Clinton H. Joiner, M.D., Ph.D. (Duke, 1977); Barry M. Nathan, M.D. (Albany, 1978); Ward R. Rice, M.D., Ph.D. (Chicago, 1978); Frank Ritter, M.D. (Utah, 1978); Michael E. Ruff, M.D. (Texas, Galveston, 1978); Deborah L. Squire, M.D. (Northwestern, 1978); Robert W. Watten, M.D., Ph.D. (Washington Univ., 1978).

First Year Residents: William L. Coleman, M.D. (New Mexico, 1979); Marvin L. Dixon, M.D. (Harvard, 1979); Lester J. Fahrner, M.D. (Illinois, 1979); Andrea R. Gravatt, M.D. (Pittsburgh, 1979); Roger C. Holland, M.D., Ph.D. (Chicago, 1979); Carla H. Ingold, M.D. (U.N.C. at Chapel Hill, 1979); Ross E. McKinney, M.D. (Rochester, 1979); Christopher A. Miller, M.D. (Connecticut, 1979); Daryl H. O'Brien, M.D. (Dartmouth, 1979); Robert J. Rogers, M.D. (Texas, Southwestern, 1979; Michael W. Shannon, M.D. (Duke, 1979); B. Wayne Thorpe, M.D. (Virginia, 1979).

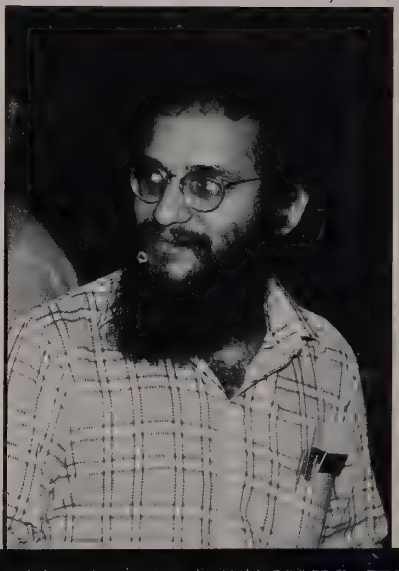
M. L. Vernon, M.D. and M. L. Dixon, M.D.

Pediatric Residents

D. Sherry, M.D.

T. E. Durr, M.D.

L. Fahrner, M.D.



PHARMACOLOGY

Norman Kirshner, Ph.D.
Chairman

When the medical school opened, the four members of the Department of Physiology and Pharmacology were somewhat shakily prepared to teach physiology and pharmacology. The head of the Department was George Eadie, a physiologist-biochemist; the other were two physiologists and one biochemist. The absence of a pharmacologist was perhaps a blessing (although not to a professional pharmacologist seeking a job in those depression years) because pharmacology was just then beginning a revolutionary change. Until the 1920's, traditional pharmacologists investigated the effects of drugs on whole animals or isolated organs. A lot of useful data accumulated, but there was little insight into the possible mechanisms of action. No homogenizer was ever seen in a pharmacology laboratory. Then in the mid-twenties, Loewi proposed acetylcholine as a neurotransmitter and showed that a number of cholingergic drugs acted by inhibiting the acetylcholine esterase. At the same time biochemists were homogenizing tissues and describing enzymes in them, and enzymes, slowly and reluctantly at first, entered into the thinking of pharmacologists. The Department shared these thoughts and for the next ten to fifteen years studied the effects of drugs on enzymes and of enzymes on drugs.

During these years up to the end of the second world war, the Department remained static, and the only change was that Dr. Frederick Bernheim took over the teaching of pharmacology and got out of the teaching of physiology. This minor schism did not go any further. A few years later, Eadie relinquished the chairmanship, and Dr. F.G. Hall, a physiologist in the undergraduate Department of Zoology, took over. Dr. Hall brought in a few people, among them Drs. DeTurk and Ottolenghi, and the Department showed signs of expanding slightly. This second stage lasted until 1960 when Dr. D.C. Tosteson, a physiologist, was appointed chairman.

In the decade of the sixties and in the early seventies, there was a rapid expansion of the Department of Physiology and Pharmacology. For teaching purposes, quasi divisions of pharmacology and of physiology were formed, but the Department remained under one administrative head, with no clear cut distinction between the members of the divisions. In this period several new people who eventually became the nucleus for the Pharmacology Department came to Duke. Among these are Drs. L. Lack, S. Schanberg, E. Mills, T. Slotkin, D. Menzel, G. Rosen, and M.B. Abou-Donia. Upon Dr. Tosteson's departure in 1975, the decision was made to set up independent Departments of Pharmacology and Physiology. This was brought to fruition in 1977 with the appointments of Dr. Norman Kirshner as Chairman of the Pharmacology Department and Dr. Edward Johnson as Chairman of the Physiology Department. In the past three years the Department of Pharmacology has added Drs. C. Kuhn, P.M. Conn and V. Nadler to its faculty and has established a Division of Clinical Pharmacology led by Dr. D. Shand as Head of the Division and staffed by Drs. T. Bjornsson, J. Lazar, R. Whorton, and C. Tschantz. In addition to the above faculty who have primary appointments in Pharmacology, the Department has close ties in several clinical departments with members who hold joint appointments, as well as in neighboring institutions with members who hold adjunct appointments and participate in the teaching and research training responsibilities of this Department.

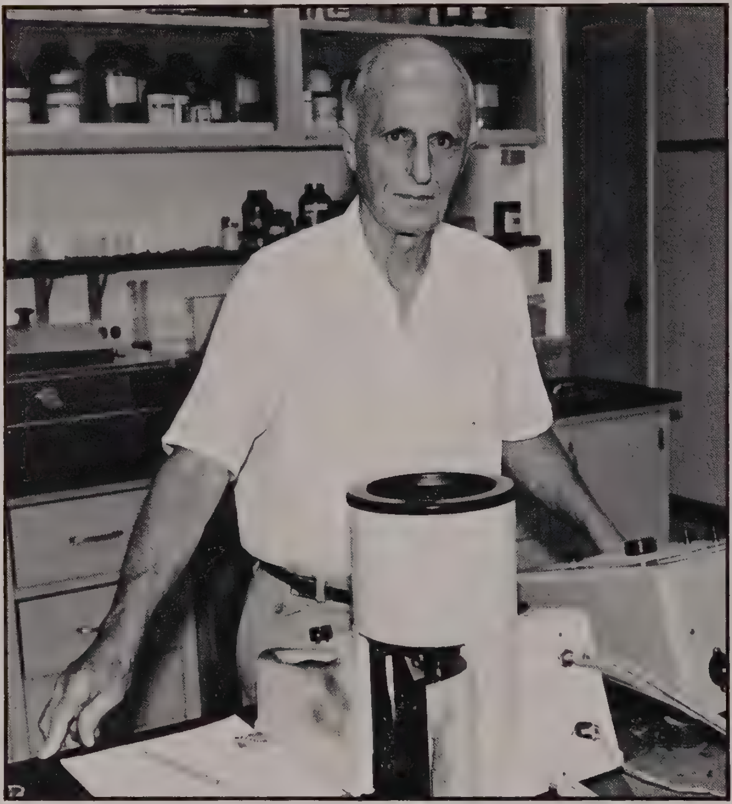
The research activities of the Department are broadly diversified but with a high concentration of effort on studies related to the nervous system. These include investigations of the synthesis, storage, and secretion of neurotransmitter substances and neurohormones in the central and peripheral nervous system, the effects of drugs on the development of the nervous system and behavior, neuronal regulation of the cardiovascular system, electrophysiology of synaptic transmission, hormonal and neuronal receptors, and the neurotoxicity of insecticides and pesticides. Other research areas include ion transport in bacteria, enterohepatic circulation, immunological responses to parasitic infection, drug metabolism, and toxicology of airborne pollutants. Research in the Division of Clinical Pharmacology has a variety of interests including cardiovascular system, hypertension, blood clotting, drug metabolism, clinical evaluation of drugs and the development of new therapeutic regimens.

M. Johnson and S. Schanberg, M.D., Ph.D.

The Department has a strong commitment to teaching medical students and in pre- and post-doctoral graduate training. The pre-doctoral program has twenty-five students enrolled as candidates for the Ph.D. degree and twenty-four post-doctoral fellows taking advanced training in the faculty laboratories.

Although a new department, we are firmly established and our roots are deep. Dr. Frederick Bernheim, a member of the founding faculty of the Duke University Medical Center, is Professor Emeritus of Pharmacology, and he is still actively engaged in teaching and research. With this as our heritage we look forward to the next fifty years with great enthusiasm.

Ted Slotkin, Ph.D.



F. Bernheim, Ph.D. James B. Duke Professor Emeritus

Michael Conn, Ph.D.

PHARMACOLOGY FACULTY

Row 1 (L to R): J. Lazar, E. Ellinwood, J. Bartolomé, B. Shivastav, N. Kirshner, G. Rosen, V. Nadler, W. Wilson. **Row 2:** C. Kuhn, S. Schanberg, P. Wilder, J. Davis. **Row 3:** L. Lack, M. Conn, R. Whorton, F. Bernheim, A. Ottolenghi, T. Slotkin, B. Abou-Donia.

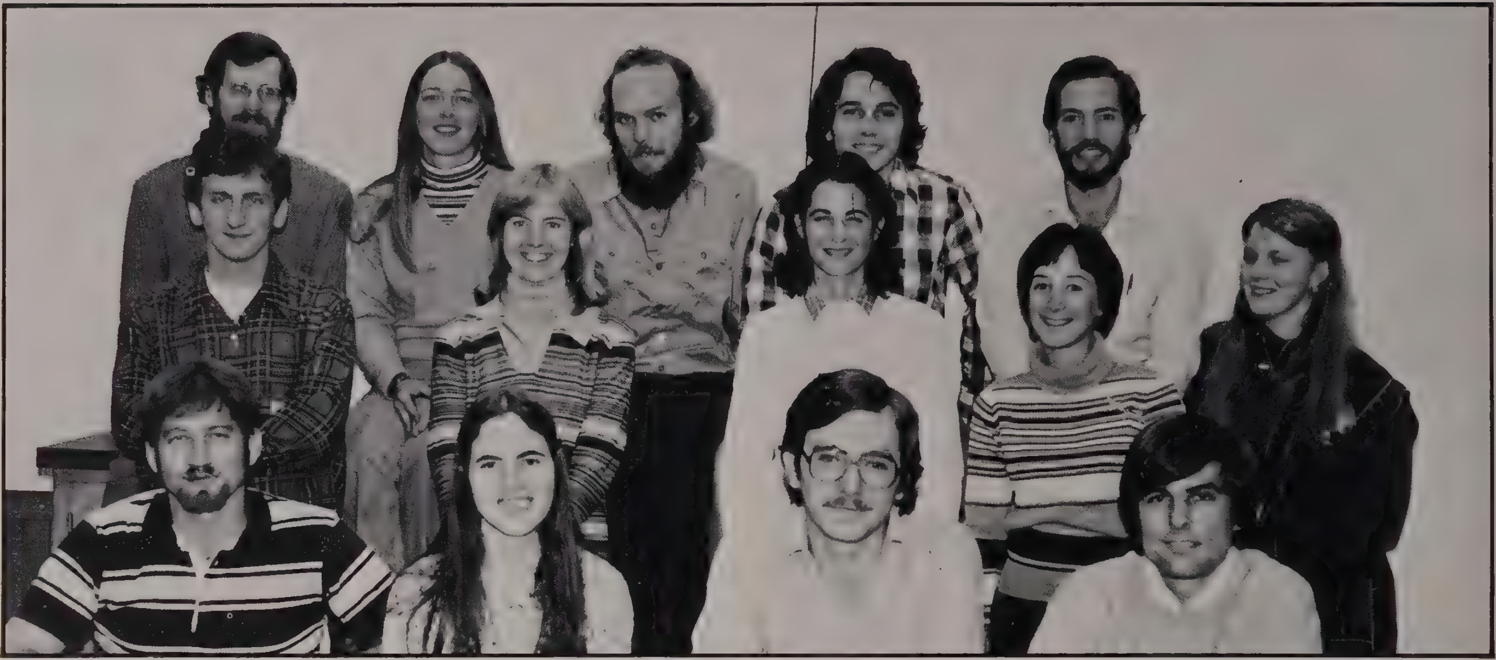
Professor: Norman Kirshner, Ph.D. (Pennsylvania State, 1952), *Chairman.*
James B. Duke Professor Emeritus: Frederick Bernheim, Ph.D. (Cambridge University, 1928).
Professors: Everett H. Ellinwood, M.D. (U.N.C. at Chapel Hill, 1959); Leon Lack, Ph.D. (Columbia, 1953); Daniel B. Menzel, Ph.D. (California at Berkeley, 1962); Athos Ottolenghi, M.D. (Univ. of Pavia, 1946); Saul M. Schanberg, M.D. (Yale, 1964), Ph.D. (Yale, 1961); David G. Shand, M.D. (St. Bartholomew's Hospital Med. Coll., London, 1964); Theodore Slotkin, Ph.D. (Rochester, 1970); Pelham Wilder, Ph.D. (Harvard, 1950).
Associate Professors: Mohamed Abou-Donia, Ph.D. (California at Berkeley, 1966); James Norman Davis, M.D. (Cornell, 1965); Laura E. Gutman, M.D. (Stanford, 1962); Elliott Mills, Ph.D. (Columbia, 1964); Gerald M. Rosen, Ph.D. (Clarkson, 1969); Harold C. Strauss, M.D., C.M. (McGill University, 1964); Markku Linnoila, M.D. (University of Helsinki, 1972), Ph.D. (University of Helsinki, 1974).
Assistant Professors: Thorir D. Bjornsson, M.D. (Univ. of Iceland, 1971); P. Michael Conn, Ph.D. (Baylor, 1976); James C. Fuchs, M.D. (Johns Hopkins, 1964); Cynthia M. Kuhn, Ph.D. (Duke, 1975); Jeffrey D. Lazar, M.D. (University of Michigan, 1974); Julian Victor Nadler, Ph.D. (Yale, 1972); A. Richard Whorton, Ph.D. (Vanderbilt, 1975).
Medical Research Assistant Professors: Jorge Bartolomé, Ph.D. (Univ. of Chile, 1978); Brij Shrivastav, Ph.D. (Univ. of Western Ontario, 1968); Christian Tschanz, M.D. (University of Basle, 1972).
Adjunct Professors: Pedro Cuatrecasas, M.D. (Washington Univ., 1962); Gertrude Elion, D.Sc. (George Washington, 1969); Leon Golberg, D.Sc. (University of Witwatersrand, 1946); George H. Hitchings, Ph.D. (Harvard, 1933); Charles A. Nichol, Ph.D. (Wisconsin, 1949); Vladimir Petrow, D.Sc. (Univ. of London, 1947).
Adjunct Associate Professor: Humberto Viveros, M.D. (Univ. of Chile, 1962).
Adjunct Assistant Professor: Wilkie A. Wilson, Jr., Ph.D. (Duke, 1971).

B. Abou-Donia, Ph.D.

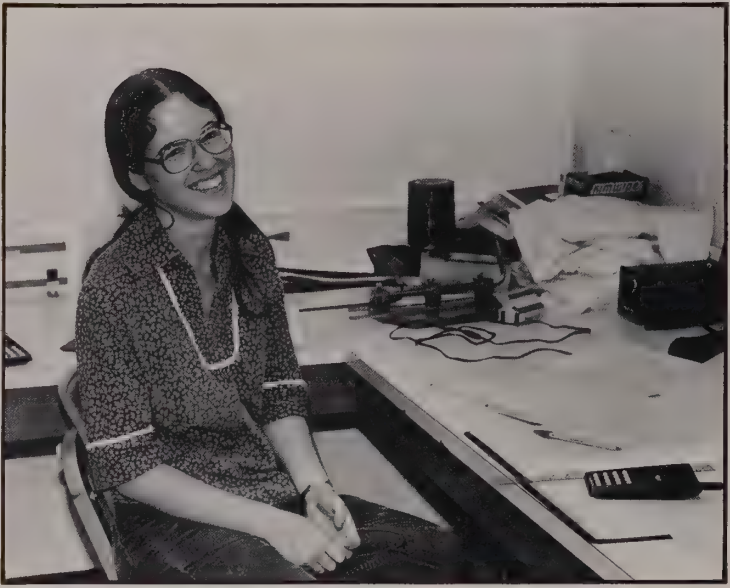
E. Rauckman, Ph.D.

Alberto Grignolo, Ph.D.

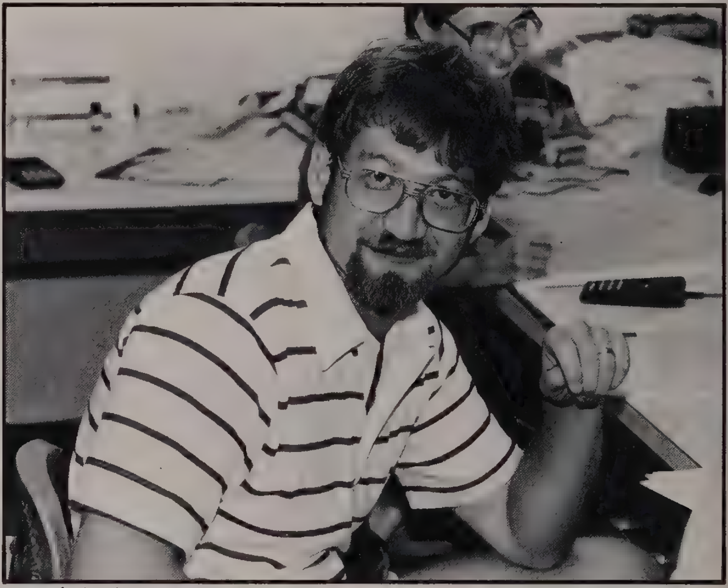
PHARMACOLOGY GRADUATE STUDENTS



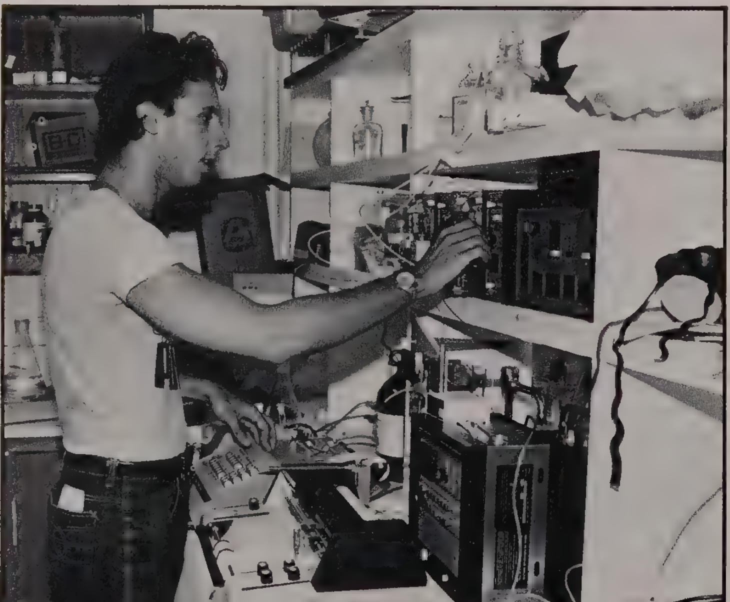
Row 1 (L to R): E. Finkelstein, S. Patton, M. Johnson, S. Williams. **Row 2:** W. Fowler, J. Marian, J. George, M. Kloss, L. Werling. **Row 3:** S. Gospe, S. Geyer, J. Huguenard, L. Carter, D. Mangan.



S. Patton



E. Finkelstein



J. Lasker

C. Lau and G. Evoniuk

PHYSIOLOGY

Edward A. Johnson, M.D.
Chairman

When the Duke University School of Medicine opened its doors in 1930, the Chairman of the Department of Physiology and Pharmacology was Dr. George Eadie who was recruited by Dean Wilburt C. Davison, like so many of the original faculty of this institution, from the Johns Hopkins School of Medicine. Scientifically, Dr. Eadie is perhaps best remembered as the originator of the "Eadie plot," a standard technique used in enzyme studies for determining the parameters of reactions from kinetic data.

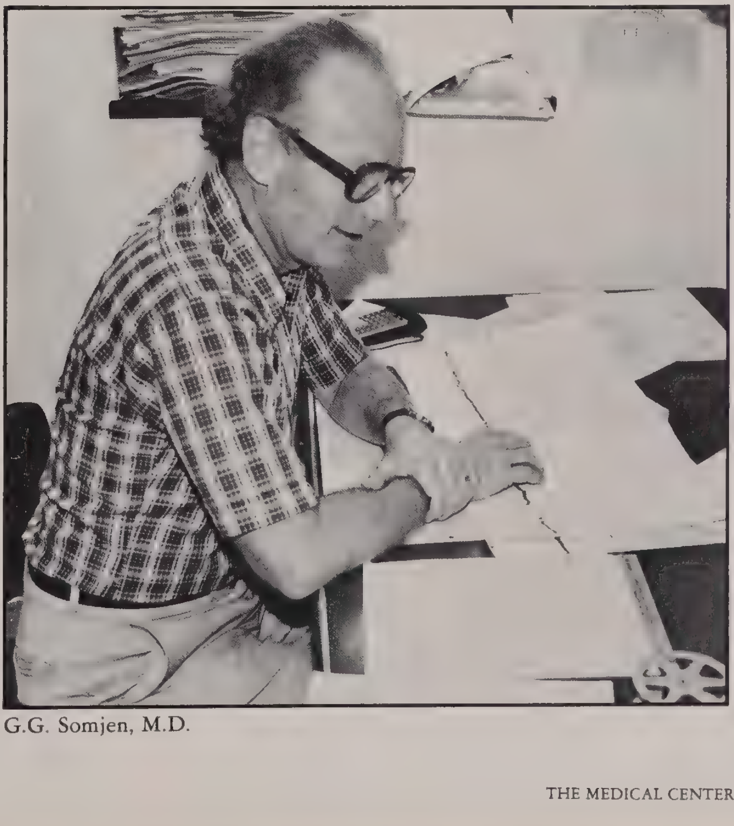
Dr. Eadie continued to chair the Department until the 1940's when that responsibility was taken over by Dr. F.G. Hall, one of the pioneers in the physiological study of humans in hostile environments, such as high altitudes, outer space and the depths of the ocean. The F.G. Hall Laboratory for Environmental Research in the Duke Medical Center commemorates this great physiologist. During all these years, the Pharmacology Division of the Department of Physiology and Pharmacology was led by Dr. Frederick Bernheim, one of the first to study the mechanism of drug action on metabolic and enzymatic systems at the cellular and subcellular level.

In the 1960's a major expansion of the Department of Physiology and Pharmacology was led by Dr. D.C. Tosteson, who was appointed Chairman in 1961. He attracted a number of outstanding investigators to Duke with interests primarily in the cellular and molecular aspects of physiology and pharmacology. Funds were raised to build the first of three buildings on Science Drive to be devoted to the basic medical sciences. This first building, named after Nanaline H. Duke, the wife of James B. Duke, was opened in 1968. An important international symposium entitled "The Molecular Basis of Membrane Function" was held by the Department that summer to coincide with the dedication of the new building. The theme of the symposium represented, both then and now, an important aspect of the research in the Department. In the spirit of the times, and with generous funding from federal sources, an aggressive program of research and graduate education was developed. As the biomedical research capacity of this country underwent an explosive growth through the decade of the 1960's, the Department of Physiology and Pharmacology at Duke became one of the acknowledged centers of excellence in the nation.

After Dr. Tosteson's departure in 1975 to become Dean of the University of Chicago School of Medicine, and later Dean of the Harvard Medical School, the Department of Physiology and Pharmacology was divided into a Department of Physiology and a Department of Pharmacology. Dr. John Salzano served as Acting Chairman until 1977 when Dr. Edward A. Johnson was appointed Chairman of the Department of Physiology, and Dr. Norman Kirshner was appointed Chairman of the Department of Pharmacology. Dr. Johnson, who was brought to Duke in the early 1960's by Dr. Tosteson during the expansion phase of Departmental growth, is a leading investigator in cardiac electrophysiology.

At the present time, the research interests of the Department cover a wide range of topics addressing the central issues of contemporary physiology. These interests are reflected in course offerings, as well as opportunities for full-time research, available to all students during their elective basic science year. Modern physiology stresses the integration and application of insights and concepts derived from the chemistry and physics of biological systems to the study of actual living cells and tissues, as well as isolated organs, and, indeed, the whole animal. Since the living organism is the ultimate "black box," an essential feature of this work is computer modelling of physiological activity by simulation techniques using high capacity, time-sharing systems. Several such devices are available in the Department.

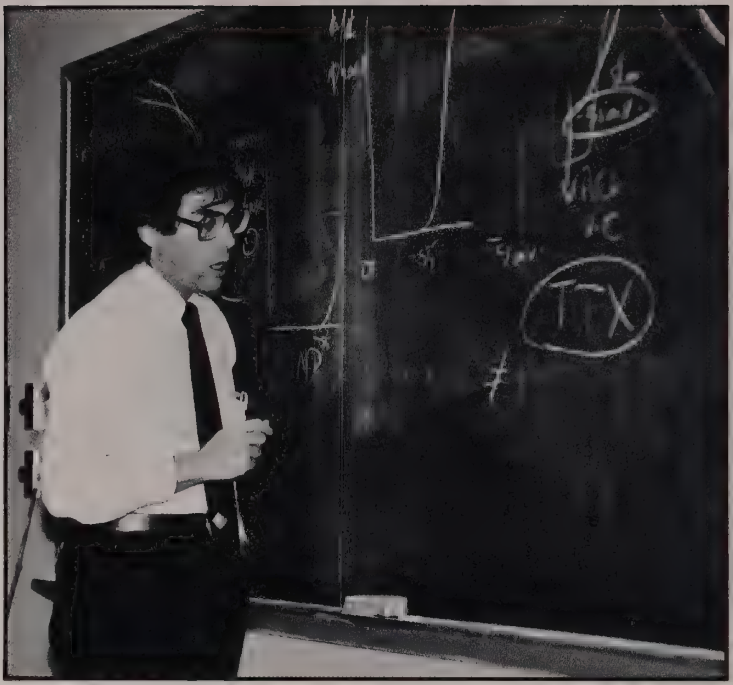
The emphasis on the study of membrane phenomena as one of the central problems of physiology, which was developed under Dr. Tosteson's leadership, continues in many laboratories. Investigations cover a broad spectrum including the physical chemistry of isolated and purified membrane proteins, the properties of synthetic lipid bilayer membranes, ion transport in red cells, the effect of immune reactions on membrane function, the role of metabolism in ion transport across epithelia, the effect of hormones on membrane transport, and ion transport in excitable cells in tissue culture. At the Duke Marine Laboratory in Beaufort, North Carolina, an important outpost of the Department is devoted to the study of solute and water transport in marine organisms. It also provides collaborative opportunities for visiting faculty and students from the Department who wish to investigate marine problems.



G.G. Somjen, M.D.

Active groups in the Department are also doing research on smooth muscle physiology, hormonal control of intermediary metabolism, flagellar motility, coronary blood flow and ventricular function, metabolism of the intact brain, electrical and mechanical properties of cardiac muscle, integrative neurophysiology of the brain and spinal cord, mechanism of excitation and propagation of nerve impulses, respiratory regulation and airway smooth muscle responses, ovarian physiology, effect of the environment on physiological functions, oxygen transport and utilization in the eye, electrophysiology of the retina, protein and nucleic acid synthesis in relation to the cell cyle in eucaryotes, and the identification and physiological effects of marine toxins.

Although these programs cover a wide front in an advancing science, they nevertheless share one thing in common. As was pointed out above, the ultimate goal of physiological research is nothing less than an integration of its experimental findings with information gleaned from the other basic medical sciences to form a comprehensive model of the intact organism. The widespread application of insights derived from these effects to clinical problems of diagnosis and treatment of human disease testifies to the central role played by physiology in health education and research.



H. Strauss, M.D.

H. Keizer

P. Evans and J. Gehling

PHYSIOLOGY FACULTY

Sitting (L to R): M. Lieberman, A. Manring, P. Lauf, E. Johnson, S. Simon, L. Mendell, G. Somjen. **Standing:** T. Anderson, G. Baumann, M. Kootsey, M. Hines, F. Ramon, G. Padilla, L. Mandel, K. Schmidt-Nielsen, J. Salzano, T. McManus.

Professor: Edward A. Johnson, M.D. (U. of Sheffield, 1953), *Chairman.*

Professors: Jacob J. Blum, Ph.D. (Chicago, 1952); Irving T. Diamond, Ph.D. (Chicago, 1953); Frans F. Jobsis, Ph.D. (Michigan, 1958); Peter K. Lauf, M.D. (U. of Freiburg, 1960); Melvyn Lieberman, Ph.D. (State U. of New York, 1964); John W. Moore, Ph.D. (Virginia, 1954); John V. Salzano, Ph.D. (Iowa, 1956); George G. Somjen, M.D. (New Zealand, 1961); Madison S. Spach, M.D. (Duke, 1954); James B. Duke Professor Charles Tanford, Ph.D. (Princeton, 1947).

Associate Professors: Nels C. Anderson, Ph.D. (Purdue, 1964); Peter B. Bennett, Ph.D. (U of Southampton, 1964); Robert P. Erickson, Ph.D. (Brown, 1958); Joseph C. Greenfield, M.D. (Emory, 1956); John W. Gutknecht, Ph.D. (U.N.C. at Chapel Hill, 1963); J.A. Kylstra, M.D. (Leiden, Holland, 1952); Harold Lebovitz, M.D. (Pittsburgh, 1956); Thomas J. McManus, M.D. (Boston, 1955); Lazaro J. Mandel, Ph.D. (Pennsylvania, 1969); Lorne Mendell, Ph.D. (Mass. Inst. of Tech., 1965); Elliot Mills, Ph.D. (Columbia, 1964); George M. Padilla, Ph.D. (California at Los Angeles, 1960); Jacqueline Reynolds, Ph.D.; Myron Wolbarsht, Ph.D. (Johns Hopkins, 1958.)

Assistant Professors: Page A.W. Anderson, M.D. (Duke, 1963); Evan Evans, Ph.D. (California at San Diego, 1970); Stuart Handwerger, M.D. (Maryland, 1964); R. Scott Jones, M.D. (Texas, 1961); Fidel Ramon, M.D. (U. of Mexico, 1964); David W. Schomberg, Ph.D. (Purdue, 1965); Sidney Simon, Ph.D. (Northwestern, 1973); Howard Wachtel, Ph.D. (New York U., 1967); Andrew G. Wallace, M.D. (Duke, 1959); Andrew Wechsler, M.D. (State U. of New York, 1964); William E. Yarger, M.D. (Baylor, 1963).

Assistant Medical Research Professors: Gilbert Baumann, Dr.Sc.(Swiss Federal Inst. of Tech., 1968); Ping Beall, Ph.D. (Tulane, 1967); Michael Hines, Ph.D. (Chicago, 1975); Andres Manring, Ph.D. (Ohio, 1970); Russell T. Snow, Ph.D. (Duke, 1971); Avis Sylvia, Ph.D. (U.N.C. at Chapel Hill, 1973); Jose Torre-Bueno, Ph.D. (Rockefeller, 1975).

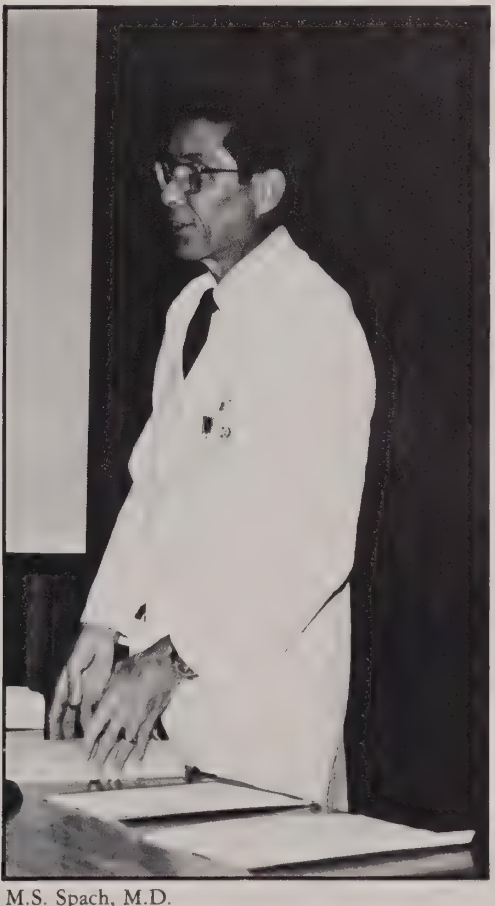
Associates: Fred Cobb, M.D. (Mississippi, 1964); Vincent Dennis, M.D. (Georgetown, 1966); Peter G. Kaufman, Ph.D. (Chicago, 1971).

Adjunct Associate Professor: James M. Schooler, Jr., Ph.D. (Wisconsin, 1964).

Adjunct Assistant Professors: Reginald D. Carter, Ph.D. (Bowman Gray, 1970); Russell Horres, Ph.D. (Duke, 1975); Philip A. McHale, Ph.D. (Duke, 1975).

Adjunct Associate: Thomas W. Anderson, Ph.D. (Duke, 1971).

O. Oakley

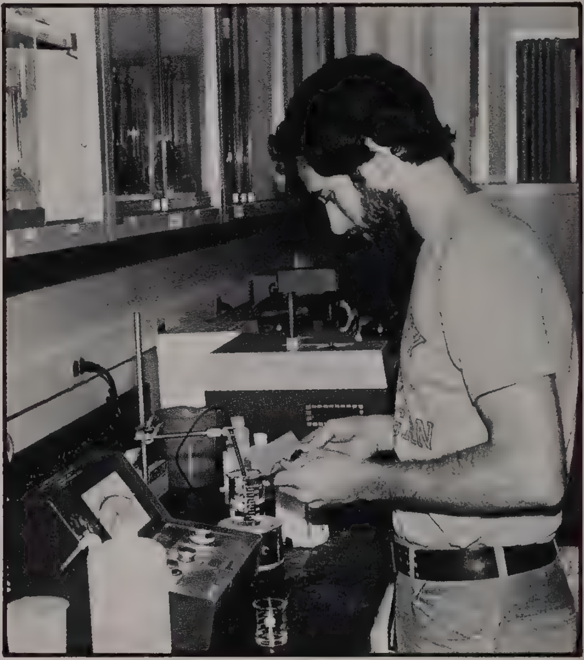


M.S. Spach, M.D.

PHYSIOLOGY GRADUATE STUDENTS

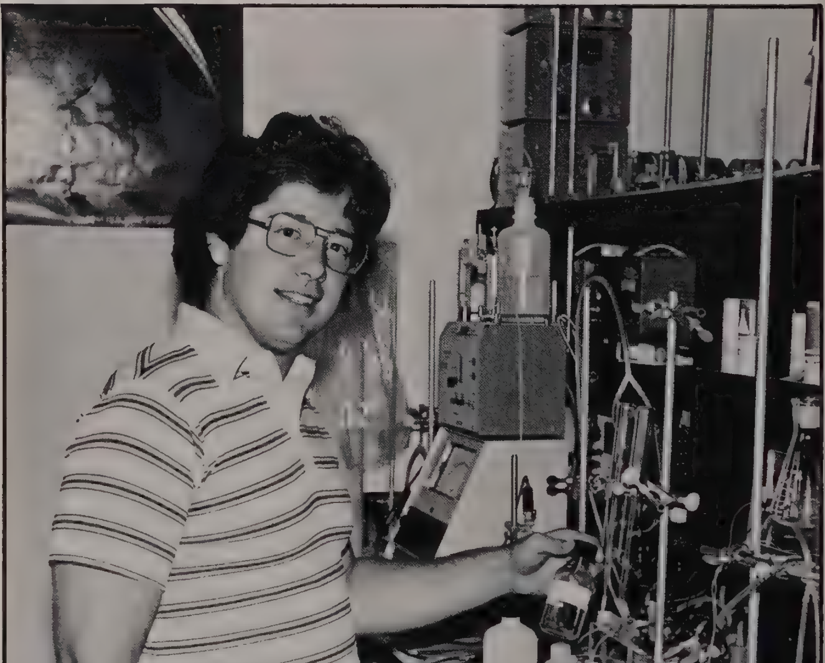
Row 1 (L to R): J. Caffrey, D. Wheeler, S. Soltoff, L. Ebihara, S. Harris, S. Brazzamano, S. Schiff, Y. Peng, M. Johnston. **Row 2:** B. Allen, S. Gullans, M. Haas, G. Schwartz, C. Woods, L. Koro, J. Crawford, D. Tauck, S. Jaslove, N. Stockbridge, T. Cope.

Lisa Ebihara



Steve Soltoff

Dave Wheeler



Stuart Harris

PSYCHIATRY

H. Keith H. Brodie, M.D.
Chairman

The Department of Psychiatry provides training for first-year medical students in Human Behavior. Second year medical students spend eight weeks in a Clinical Psychiatry clerkship. Third and fourth year medical students are offered a wide range of elective courses in psychiatry and behavioral sciences. The Department of Psychiatry faculty of over one hundred are responsible for a general psychiatry residency. Approximately fifty house staff are currently being trained for board certification in Psychiatry. In addition, the Department is responsible for Child Psychiatry Fellowship training as well as several research and clinical fellowships in consultation-liaison psychiatry, research training, and geropsychiatry. The Department provides a medical psychology internship for Ph.D. candidates in clinical psychology.

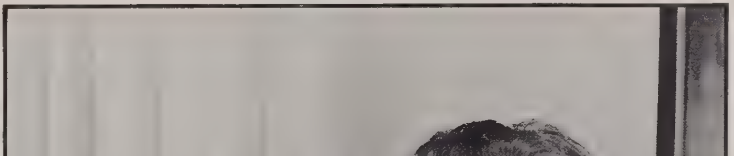
The history of the Department of Psychiatry at Duke may be divided into three distinct phases. The first of these phases extended from 1930 to 1940, during which a Division of Neuropsychiatry was created in the Department of Medicine, and Dr. Raymond Crispell, who had trained under Dr. Adolf Meyer at John Hopkins, was offered a post as the first psychiatrist on the Duke Medical School faculty in 1933. In 1940, the Rockefeller Foundation provided a seven-year grant to the Medical School with the stipulation that the University build and equip a psychiatric ward and provide additional support to create a Department of Psychiatry. This was accomplished, and Psychiatry was given space on the third floor of the new hospital wing. Richard Lyman, M.D., from the Johns Hopkins, was selected as the first Department Chairperson. Under Dr. Lyman's leadership, the Department expanded its teaching of medical students, developed both an inpatient and outpatient service, started an EEG laboratory, developed a residency program, and started a child psychiatry clinic. In 1953 Dr. Lyman was succeeded by Dr. Ewald W. Busse, a distinguished psychiatrist from the faculty at the University of Colorado. Dr. Busse chaired the Department until 1974, and it was during his chairmanship that the Department achieved national recognition for its service, training, and research programs. The inpatient unit was expanded, and faculty were asked to assume greater teaching responsibilities in the training of medical students, both in the pre-clinical and in the clinical years.

The clinical orientation of the Department is eclectic. Most faculty are specialists in individual psychotherapy, group psychotherapy, psychopharmacology, psychoanalysis, behavioral modification, family therapy, biofeedback, child psychiatry, community psychiatry, medical psychology, or liaison psychiatry. The pluralism of the Duke faculty allows the development of resident graduates broadly trained in each of the psychotherapies.

In addition to therapy, all faculty are engaged in research and teaching. Each year the Departmental faculty author several hundred publications. They work in collaboration with several of the basic and clinical science departments in the School of Medicine together with numerous graduate departments of Duke University.

Clinical services are provided on the eighty bed inpatient service, the outpatient clinic, the emergency room, and the liaison psychiatry service of Duke Hospital. In addition, the faculty are responsible for the psychiatry inpatient service of eighty beds in the Durham Veterans Administration Hospital and serve as members of the attending staff of the Durham County General Hospital Psychiatry Department. Some faculty carry out teaching and research at the John Umstead State Hospital. Training in Child Psychiatry is offered at the Children's Guidance Clinic situated adjacent to the Duke University Medical Center. A developing collaborative relationship has been established with the Durham County Community Mental Health Center and with the Lincoln Neighborhood Health Center for training, research and clinical care.

The Department of Psychiatry is composed of the Divisions of Biological Psychiatry, Child and Adolescent Psychiatry,

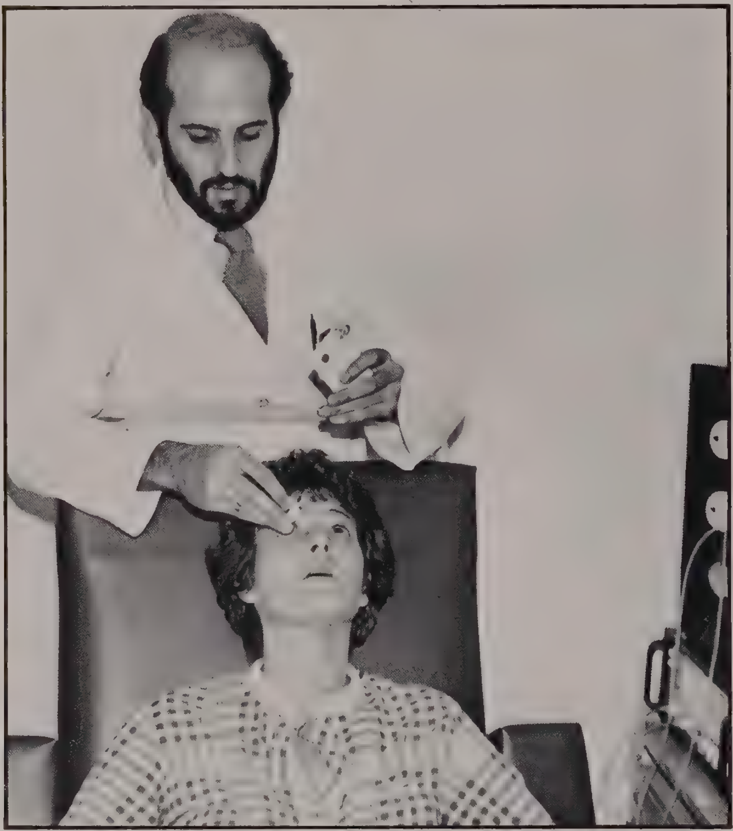


G.A. Silver, M.D

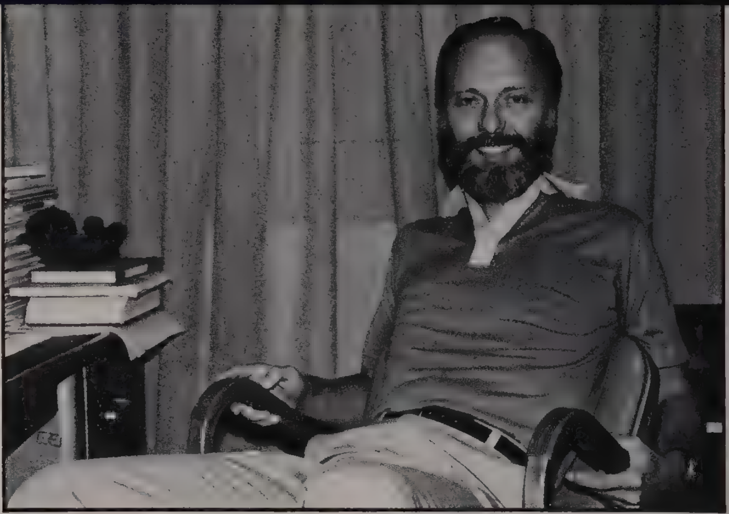
Community and Social Psychiatry, Inpatient Psychiatry Services, Outpatient Medicine, and Medical Psychology.

Last year, the Department provided 26,000 inpatient care days and admitted 1,085 patients to Duke Hospital. The faculty and staff were active in 35,208 outpatient visits. The Department is comprised of approximately 120 full-time faculty members, the majority of whom are psychiatrists. Approximately one hundred faculty members are engaged in various research projects funded by NIMH, NIDA, private foundations, individual donations, etc.

Recognizing the responsibility for maintenance of a leadership role in medical education and in research investigation, the staff of the Department of Psychiatry at Duke nevertheless adopt as a principal and paramount objective the provision of outstanding medical and psychiatric patient care.



D. Hawkins, M.D.



R. Surwit, Ph.D.

Professor: H. Keith H. Brodie, M.D. (Columbia, 1965), *Chairman.*

DIVISION OF CHILD AND ADOLESCENT PSYCHIATRY

Professor: John A. Fowler, M.D. (Bowman Gray, 1946), *Head of Division.*

Visiting Research Professor: Robert Coles, M.D. (Columbia, 1954).

Associate Professors: Harold J. Harris, M.D. (Long Island Med. Coll., 1949); J. David Jones, M.D. (Duke, 1954); Charles R. Keith, M.D. (Harvard, 1961).

Assistant Professors: Marcelino Amaya, M.D. (Univ. Nacional Autonoma de Mexico, 1954); William B. Anderson, M.D. (Minnesota, 1948).

Assistant Clinical Professors: Cesar Guajardo, M.D. (Univ. de Nuevo Leon, Mexico, 1961); W. Sam Yancy, M.D. (Duke, 1961).

Clinical Associates: Lucy T. Davis, Ed.D. (Columbia, 1955); William Mackey, M.D. (Tennessee, 1969); Daphne Rosenblitt, M.D. (Duke, 1974); Donald L. Rosenblitt, M.D. (Duke, 1973); Jean G. Spaulding, M.D. (Duke, 1972).

Instructors: Muki Fairchild, M.S.W. (U.N.C. at Chapel Hill, 1976); Alice F. Long, M.A. (Chicago, 1953).

Clinical Instructors: Barbara Denny, M.S.W. (U.N.C. at Chapel Hill, 1975); Etta Leathers, M.E. (North Carolina Central, 1974).

DIVISION OF COMMUNITY AND SOCIAL PSYCHIATRY

Associate Professor: Charles E. Llewellyn, Jr., M.D. (Med. Coll. of Virginia, 1946), *Head of Division.*

Professors: Kurt Back, Ph.D. (Massachusetts Inst. of Tech., 1949); George L. Maddox, Ph.D. (Michigan, 1956); Frederick T. Melges, M.D. (Columbia, 1961); Erdman B. Palmore, Ph.D. (Columbia, 1959).

Associate Professors: James H. Carter, M.D. (Howard, 1966); Linda K. George, Ph.D. (Duke, 1975); Jacquelyne J. Jackson, Ph.D. (Ohio, 1960).

Assistant Professors: James O. Hoover, M.D. (Iowa, 1966); Kenneth Rockwell, M.D. (Duke, 1961).

Associate: Jane Clark Moorman, M.S.W. (Tulane, 1971).

Assistant Clinical Professor: Khalil Tanas, M.D. (American Univ. of Beirut, 1972).

Clinical Associates: David Larson, M.D. (Temple, 1973); Sally Johnson, M.D. (Jefferson, 1976); Edward J. Rhoads, M.D. (Duke, 1975).

Instructor: Frantz Hershey, M.Ed. (Univ. of Virginia, 1974).

Lecturers: James W. Osberg, M.D. (Tufts, 1948); Robert Rollins, M.D. (Duke, 1956); N.P. Zarzar, M.D. (American Univ. of Beirut, 1956).

Research Associates: Gerda Fillenbaum, Ph.D. (London, 1966); Richard Landermann, Ph.D. (Duke, 1978); Lawrence Wallman, M.A. (Duke, 1976).

PSYCHIATRY FACULTY

Row 1 (L to R): E. Palmore, H. Harris, F. Hine, J. Parker, K. Brodie, E. Crovitz, R. Green, C. Llewellyn, D. Hawkins, M. Breslin. **Row 2:** L. George, R. Weiner, W. Grosch, J. Weiss, E. Thompson, A. Dyer, A. Whanger, D. Pauk, S. Wang, D. Jones. **Row 3:** R. Thompson, P. DeRemer, P. Boudewyns, J. Sullivan, E. Ellinwood, D. Werman, J. Cavenar, M. Kilbey, L. Wang, D. Gianturco, D. Blazer, B. Bressler. **Row 4:** R. Surwit, R. Williams, F. Keefe, E. Row, C. Margolin, E. Steinbock, T. Orleans, I. Siegler, J. Moorman, P. Trent, A. Maltbie. **Row 5:** J. Houpt, H. Ziesat, J. Strayhorn, J. Talley, M. Volow, J. Nash, D. Ramm.

DIVISION OF BIOLOGICAL PSYCHIATRY

Professor: William P. Wilson, M.D. (Duke, 1947), *Head of Division.*

Professors: H. Keith H. Brodie, M.D. (Columbia, 1965); Everett H. Ellinwood, Jr., M.D. (U.N.C. at Chapel Hill, 1959); Robert L. Green, Jr., M.D. (Hahnemann, 1946); William K. Zung, M.D. (Texas, 1961).

Clinical Professor: Richard J. Wyatt, M.D. (Johns Hopkins, 1964).

Associate Professors: Jonathan Davidson, M.D. (Univ. Coll., London, 1976); C. William Erwin, M.D. (Texas, 1960); Veli Markko Linnoila, M.D., Ph.D. (Helsinki, 1972); John L. Sullivan, M.D. (Johns Hopkins, 1969).

Assistant Professor: Ronald J. Taska, M.D. (Baylor, 1973).

Clinical Associate: Bennett Leventhal, M.D. (Louisiana, 1974).

Medical Research Associate: Richard Weiner, M.D., Ph.D. (Duke, 1973).

DIVISION OF INPATIENT SERVICES

Professor: Frederick R. Hine, M.D. (Yale, 1949), *Head of Division.*

Professor: John M. Rhoads, M.D. (Temple, 1943).

Assistant Professors: Allen Dyer, M.D. (Duke, 1972); Elliott B. Hammett, M.D. (Duke, 1966); Z. Daniel Pauk, M.D. (Iowa, 1956); Joseph Strayhorn, M.D. (Northwestern, 1974); Erwin Thompson, M.D. (Vanderbilt, 1972).

Assistant Clinical Professors: Christine Machemer, M.D. (Univ. of Bonn, Germany, 1959); Cynia B. Shimm, M.D. (Yale, 1950); William Taylor, M.D. (Med. Coll. of Virginia, 1959).

Associate in Psychiatric Recreation Therapy: Barbara A. Yoder, M.S. (Florida, 1970).

Clinical Associates: Robert D. Miller, Ph.D., M.D. (Duke, 1973); Ernest Raba, M.D. (Texas, 1972).

Clinical Associate Psychiatric Nursing: Patricia Webster, M.S.N. (U.N.C. at Chapel Hill, 1976).

GEROPSYCHIATRY

J.P. Gibbons Professor: Ewald W. Busse, M.D. (Washington Univ., 1942), *Associate Provost and Dean, Medical and Allied Health Education.*

Professors: Daniel T. Gianturco, M.D. (Buffalo, 1960); Adriaan Verwoerdt, M.D. (Med. School of Amsterdam, 1952); Hsio-shan Wang, M.D. (National Taiwan Univ., 1953).

Associate Professor: Alan D. Whanger, M.D. (Duke, 1956).

Associate Medical Research Professor: Dietolf Ramm, Ph. D. (Duke, 1969).

DIVISION OF MEDICAL PSYCHOLOGY

Associate Professor: Robert J. Thompson, Ph.D. (North Dakota, 1971), *Head of Division.*

Professors: Irving A. Alexander, Ph.D. (Princeton, 1949); Robert C. Carson, Ph.D. (Northwestern, 1957); Edward Clifford, Ph.D. (Minnesota, 1954); Herbert F. Crovitz, Ph.D. (Duke, 1960); Martin Lakin, Ph.D. (Chicago, 1955).

Associate Professors: Patrick A. Boudewyns, Ph.D. (Wisconsin, 1968); Elaine K. Crovitz, Ph.D. (Duke, 1964); Patrick Logue, Ph.D. (North Dakota, 1965); Gail R. Marsh, Ph.D. (Iowa, 1968); Susan Schiffman, Ph.D. (Duke, 1970); W. Derek Shows, Ph.D. (Duke, 1967); Richard Surwit, Ph.D. (McGill, 1972).

Assistant Professors: Hugh V. Angle, Ph.D. (Texas Christian, 1969); Paula A. Sulliven, Ph.D. (Purdue, 1978); Robert Hock, Ph.D. (Miami, 1976); Mary M. Huse, Ph.D. (Duke 1959); Albert D. Loro, Jr., Ph.D. (Washington Univ., 1976); Robert D. Nebes, Ph.D. (California Inst. of Tech., 1971); Carole S. Orleans, Ph.D. (Maryland, 1977); Robert H. Shipley, Ph.D. (Iowa, 1972); Ilene Siegler, Ph.D. (Duke, 1974); Russell F. Tomlinson, Ph.D. (Florida, 1957).

Assistant Clinical Professor: Richard A. Lucas, Ph.D. (U.N.C. at Chapel Hill, 1972).

Assistant Medical Research Professors: Ralph Cooper, Ph.D. (Rutgers, 1973); Pamela Trent, Ph.D. (Northwestern, 1975).

Associates: James Blumenthal, Ph.D. (Washington, 1975); John Curry, Ph.D. (Catholic Univ., 1972).

Clinical Associates: James E. Byassee, Ph.D. (Louisville, 1975); William Fuchs, Ph.D. (Kentucky, 1978); Charles D. Gasswint, Ph.D. (Oklahoma, 1968); Yonkel Goldstein, Ph.D. (Michigan, 1976); Belinda Novick, Ph.D. (Michigan, 1977); Joseph E. Talley, Ph.D. (Virginia, 1977).

Clinical Instructors: Joseph W. Kertesz, M.A. (Michigan, 1973); Sabrina Molden, B.A. (U.N.C. at Chapel Hill, 1975).

Lecturers: Bernard B. Harris, Ph.D. (Wisconsin, 1955); Theodore Seitz, Ph.D. (California at Berkeley, 1958).

DIVISION OF OUTPATIENT SERVICES

Associate Professor: Jesse O. Cavenar, Jr., M.D. (Arkansas, 1963), *Head of Division.*

Professor: David S. Werman, M.D. (Lausanne, Switzerland, 1952).

Associate Professors: David M. Hawkins, M.D. (Duke, 1966); James L. Nash, M.D. (Duke, 1966).

Assistant Professors: William N. Grosch, M.D. (Albany Med. Coll., 1964); John I. Walker, M.D. (Texas at Galveston, 1979).

Assistant Professor Of Psychiatric Nursing: Eleanor M. White, M.S. (Oregon, 1963).

Assistant Clinical Professors: Priscilla Boekelheide, M.D. (Minnesota, 1949); Martin G. Groder, M.D. (Columbia, 1964); Leroy B. Lamm, M.D. (Bowman Gray, 1946); Malcolm N. McLeod, M.D. (U.N.C. at Chapel Hill, 1965); Robert D. Phillips, M.D. (Pennsylvania, 1952); Karl W. Stevenson, M.D. (Bowman Gray, 1966).

Clinical Associates: Ernest R. Braasch, M.D. (State Univ. of New York, 1970); Marianne DiMinno, M.A. (New York U., 1972); Frank B. Miller, M.D. (Michigan, 1974); Kingsley Weatherly, Jr., M.D. (Emory, 1959).

Clinical Instructors: Lesley Braasch, M.D. (State Univ. of New York, 1970); Thomas Stephenson, M.D. (Michigan, 1972).

DIVISION OF PSYCHOSOMATIC MEDICINE

Associate Professor: Jeffrey L. Houpt, M.D. (Baylor, 1967), *Head of Division.*

Professors: Joseph B. Parker, Jr., M.D. (Tennessee, 1941); Redford B. Williams, Jr., M.D. (Yale, 1967).

Associate Professor: Marianne S. Breslin, M.D. (Medical Academy, Dusseldorf, Germany, 1946).

Assistant Professors: Daniel G. Blazer, M.D. (Vanderbilt, 1969); Allan A. Maltbie, M.D. (Emory, 1969); James T. Moore, M.D. (Missouri, 1971).

Assistant Clinical Professors: James Buckingham, M.D. (Baylor, 1975); Conrad Fulkerson, M.D. (Missouri, 1969).

Associates: Randal France, M.D. (Texas at Galveston, 1973); James Weiss, M.D. (Louisiana, 1973); Michael Volow, M.D. (Seton Hall, 1964).

Clinical Associates: James Gallagher, M.D. (Stritch, 1974); Bruce Neeley, M.D. (Med. Coll. of South Carolina, 1975); Robert Winton, M.D. (Vanderbilt, 1972).

DIVISION OF PSYCHIATRIC SOCIAL WORK

Assistant Professor: Martha L. Wertz, M.S.W. (Tulane, 1952), *Head of Division.*

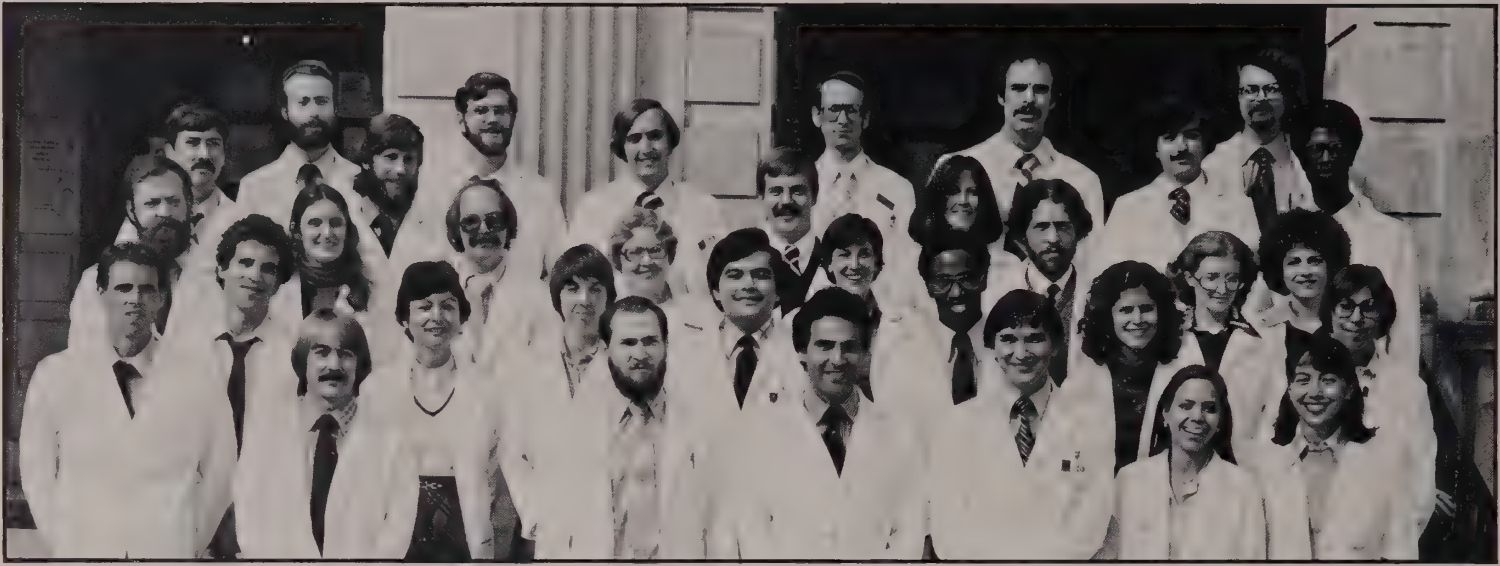
Associates: Mary A. Black, M.S.W. (U.N.C. at Chapel Hill, 1970); Katherine Buckner, M.S.W. (U.N.C. at Chapel Hill, 1964); Hallie M. Coppedge, M.S.W. (U.N.C. at Chapel Hill, 1948); Maxine R. Flowers, M.S.W. (Columbia, 1964); Glynn H. Fox, M.S.W. (Louisiana, 1966); Alice Myers, M.S.W. (U.N.C. at Chapel Hill, 1966); Lily P. Wang, M.S.W. (U.N.C. at Chapel Hill, 1959).

Clinical Associates: Constance B. Margolin, M.S.W. (Simmons, 1970); Gail McLeod, M.S.W. (U.N.C. at Chapel Hill, 1971); Mary F. Moore, M.S.W. (U.N.C. at Chapel Hill, 1972); Betty B. Parham, M.S.W. (Smith, 1971); Carolyn Thornton, M.S.W. (U.N.C. at Chapel Hill, 1968).

Instructors: Bess Autry, M.S.W. (U.N.C. at Chapel Hill, 1976); Stephen Hawthorne, M.S.W. (California, 1974); Gary Mitchell, M.S.W. (Univ. of Oklahoma, 1972).

Clinical Instructors: Christine Bell, M.S.W. (U.N.C. at Chapel Hill, 1977); Edmond Ford, M.S.W. (Univ. of South Carolina, 1979); Elinor T. Roy, M.S.W. (U.N.C. at Chapel Hill, 1977); Peggy Woodhall, M.S.W. (Florida, 1976).

PSYCHIATRY RESIDENTS

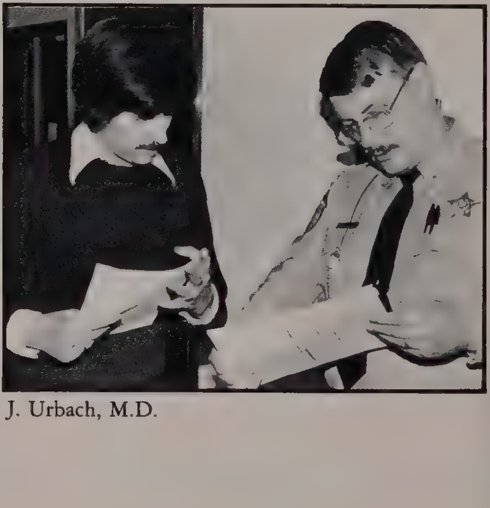


Row 1 (L to R): D. Fuller, E. Coffey, T. Bishop, P. Perault, G. O'Shanick, L. Caudill, N. Weincrot. **Row 2:** D. Feinstone, L. Sharon, M. Alden, A. Pumareiga, M. Lyles, B. Palmeri, B. Basuk. **Row 3:** J. Wells, L. Clarkson, R. Christenson, E. King, M. Berman, J. Lee, S. Campbell, S. Cohen. **Row 4:** S. Mahorney, G. Lavin, D. Ross, J. Shill, B. Gregory, J. Urbach, R. Addy. **Row 5:** W. Hoppe, R. Bagge, O. Buck, J. Cools, R. Hillard.

Chief Residents: John K. Shill, M.D. (Oxford, 1974); Steven L. Marorney, M.D. (Louisiana, 1973); Richard W. Baggé, M.D. (Jefferson, 1971).

Residents: Rudolph Addy, M.D. (Ghana, 1973); Peter Adland, M.D. (Georgetown, 1975); Meredith Alden, M.D. (Duke, 1979); Barbara Basuk, M.D. (Duke, 1979); Mary Berman, M.D. (Michigan, 1977); Terrell Bishop, M.D. (Arkansas, 1977); Owen Buck, M.D. (Vermont, 1979); Susan Campbell, M.D. (South Carolina, 1979); Lucy Caudill, M.D. (Duke, 1976); Lindsay Clarkson, M.D. (Duke, 1979); Randall Christenson, M.D. (Creighton, 1978); Edward Coffey, M.D. (Duke, 1979); Sandra Cohen, M.D. (New York, 1979); Joseph Cools, M.D. (Michigan, 1979); George Dougherty, M.D. (Stanford, 1976); Wendy Fain, M.D. (Columbia, 1977); Douglas Finestone, M.D. (Virginia, 1979); David Fuller, M.D. (Washington, 1973); Mark Glenn, M.D. (North Carolina, 1979); Bonny Gregory, M.D. (Georgia, 1978); Gary Henschen, M.D. (North Carolina, 1975); Randy Hillard, M.D. (Stanford, 1977); William Hoppe, M.D. (Creighton, 1976); Michael Kahn, M.D. (Duke, 1979); Elizabeth King, M.D. (Duke, 1958); Gordon Lavin, M.D. (Case Western, 1978); James Lee, M.D. (Duke, 1979); Michael Lyles, M.D. (Michigan, 1979); Ben Moore, M.D. (Duke, 1975); Gregory O'Shanick, M.D. (Texas, 1977); Barbara Palmeri, M.D. (Duke, 1977); Peter Perault, M.D. (Vermont, 1977); Andres J. Pumariega, M.D. (Miami, 1976); Donald Ross, M.D. (Michigan, 1978); Lorraine Sharon, M.D. (Texas, 1979); Dale Simpson, M.D. (Johns Hopkins, 1976); Robert Stewart, M.D. (Louisville, 1976); John Urbach, M.D. (Michigan, 1977); Noni Weincrot, M.D. (Michigan, 1977); James Wells, M.D. (North Carolina, 1977); James Whitman, M.D. (Wisconsin, 1977); Charles Zeanah, M.D. (Tulane, 1977).

W. Fain, M.D.



J. Urbach, M.D.

RADIOLOGY

Charles E. Putnam, M.D.
Chairman

The field of radiology and the Duke University Medical Center have grown up together over the past half-century, and both have made increasingly valuable contributions to the science of medicine. Today both have achieved eminent status in the overall picture of health care. The histories of both are among the most ambitious, exciting, and profound developments in medicine in our time. Consider the span of progress since the first days of radiology at Duke fifty years ago this past November.

Robert James Reeves was appointed Instructor of Radiology on November 25, 1929. A native Texan, Bob Reeves graduated from Baylor University Medical School, served a residency at Massachusetts General Hospital and then worked at Columbia-Presbyterian Medical Center in New York before coming to Duke.

In those early formative years, the residency training and undergraduate training for radiology was largely one of "learning by doing." The rapid development on the institution as a referral center, the wealth of clinical material, and the close cooperation and relationship of the various services and departments provided an unusual educational opportunity.

Duke's name began to be known as an early leader in that new field of radiological sciences. The young medical center's name was associated with such developments as angiography and cardiovascular radiology. Its radiologic technology training program drew widespread attention, winning credit for many achievements. Major post-war developments involved nuclear medicine, radiation oncology, and neuroradiology. George Baylin, recently named R.J. Reynolds Professor of Medical Education at Duke, was among those whose personal accomplishments enhanced the prestige of the radiology program.

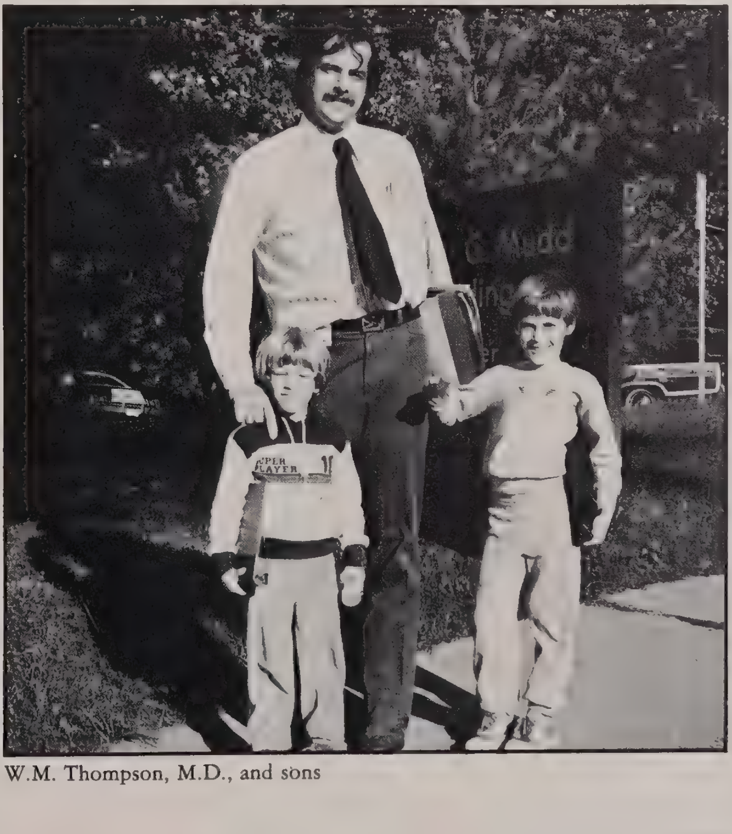
In 1965 Dr. Reeves retired as Chairman of the Department after thirty-five years of service, but not before he had inaugurated a new era of expansion, reorganization, and explosive growth. Richard Lester, who succeeded Reeves, further enhanced the autonomy of the department. The period was marked by further technological advances, sophistication of radiologic procedures, rapid growth of the health delivery systems, and unparalleled demand for radiological services. Following Dr. Lester's resignation in 1977, the department came under the direction of another Texan, Dr. Charles E. Putman.

After completing undergraduate and medical school in his native state, Putman served an internship in Iowa and then returned home for a medical residency at the University of Texas. After his radiology residency at the University of California in San Francisco, he joined the faculty at Yale University Medical School. While teaching radiology and internal medicine there, he was also clinical director of diagnostic radiology at Yale-New Haven Hospital.

Charles Putman took charge of Duke's radiological program just as radiology was entering the most prolific era in its history. Radiology today is used as an aid to clinical diagnosis, employed to monitor the progress of patients during and after treatment, to screen for diseases before symptoms develop, and to treat diseases. The increased usage of radiology is directly related to the rapid development in increasingly complex, sophisticated, relevant technology. With advancing instrumentation, the radiologist and the clinician must coordinate radiographic studies to provide for the patient the most efficacious and economical diagnostic evaluation.

Among the other outstanding achievements is Duke's residency in imaging. Now considered one of the most competitive in the country, its ten positions are filled each year from more than two hundred applicants. The program's other proud new boasts range from its greatly expanded library, named for Dr. Reeves, to the development of a coordinated animal imaging laboratory — considered to be one of the finest in the world.

There are now active basic and applied research programs in each of this Department's divisions. Major areas of interest in the Imaging Division include dynamic cerebral computerized tomography, emission computed tomography, tumor antibody scintigraphy, contrast materials for computerized tomography, therapeutic angiography and microangiography of the developing vasculature. Clinical research programs in non-invasive radionuclide techniques continue with the Departments of Surgery and Medicine. Computerized tomography, ultrasound and nuclear medicine techniques are being compared in a dedicated imaging center in the Morris Cancer Building.



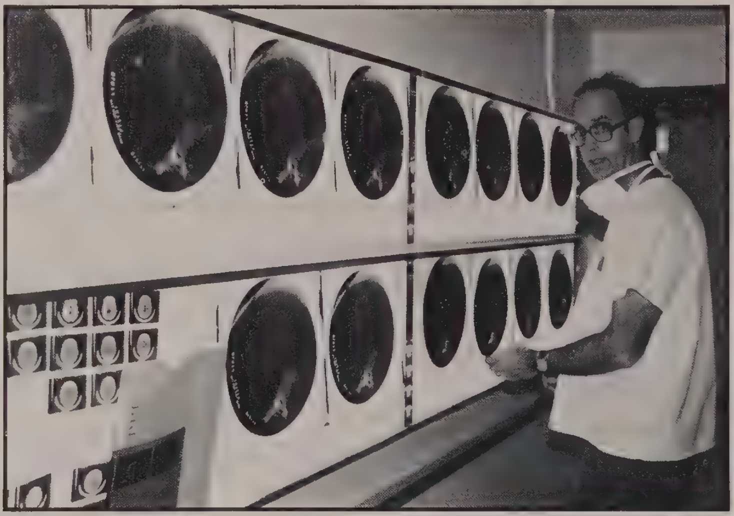
W.M. Thompson, M.D., and sons

The Radiation Oncology Division has a new and expanded facility with the most modern equipment and fulfills a significant clinical activity with a major therapeutic impact on the clinical management of the cancer patient.

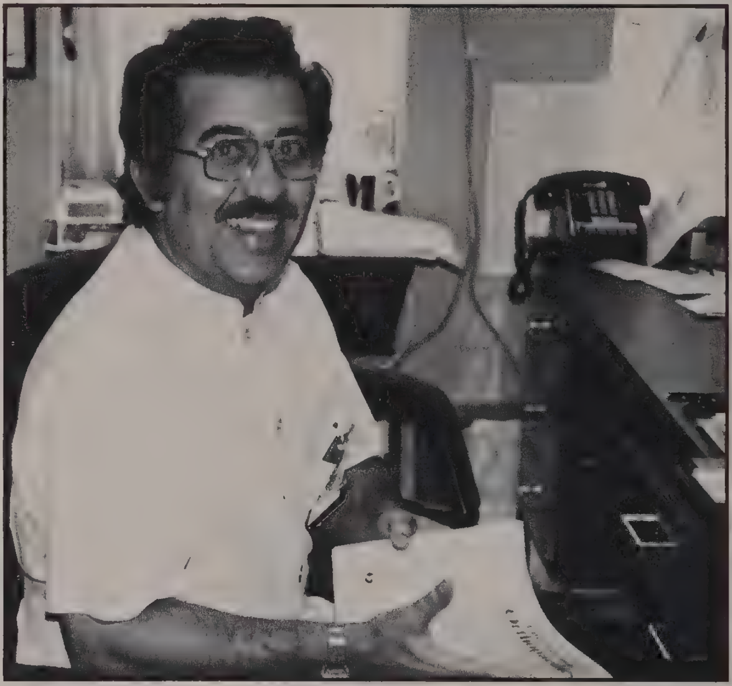
The Radiobiology Division is investigating the effects of microwave radiation in cerebral energy metabolism, carcinogenesis in transplanted hepatocytes, and mitochondrial function in cardiac ischemia. Research in the Radiological Physics Division encompasses a wide spectrum of activities including computerized dosimetry planning, alternate anode materials for mammography, and spectroscopy of gamma radiation.

Continuing developments can be expected in computerized tomography, ultrasonics, nuclear medicine, radiation oncology, vascular radiology, and all other subspecialties. It is the commitment of the Department of Radiology at Duke to provide the highest quality patient care, to advance the frontiers of medicine through research and development, and to educate future generations of health professionals.

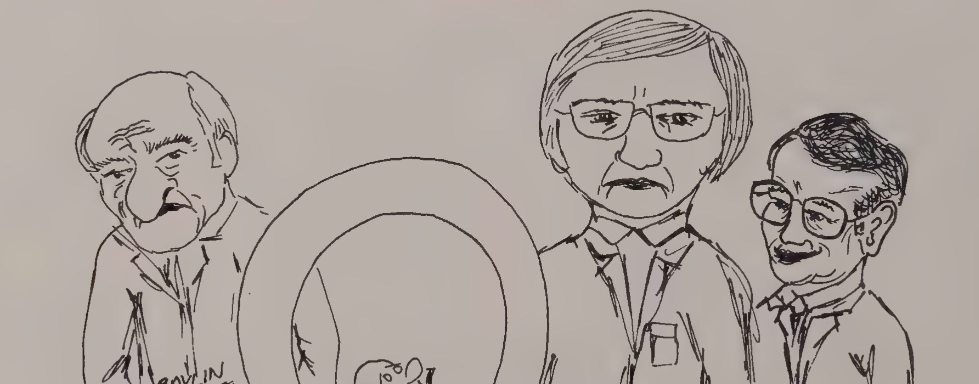
R.A. Older, M.D.



E.R. Heinz, M.D.



S. Martinez, M.D.



RADIOLOGY FACULTY

Row 1 (L to R): J. Bowie, T. Noell, C. Putnam, C. Ravin, J. Chen, R. Jaszczak, J. Beck, R. Breiman, R. Daffner, K. Woodward, F. Bagne, R. Older. **Row 2:** D. Kirks, D. Merten, N. Dahmash, D. Sullivan, J. Workman, R. Rice, P. Dubois, M. Halber, R. U, K. Gedgaudas, M. Engler. **Row 3:** J. Gehweiler, B. Madhava, E. Effmann, F. Kelvin, S. Ladwig, E. Rosenberg, R. McLelland, T. Thompson, F. O'Foghludha, G. Bentel, B. Powers, P. Ram. **Row 4:** E. Coleman, R. Jirtle, S. Mills, A. Moore, A. Sanders, B. Worde. **Row 5:** R. Fishburn, C. Nelson, C. Harris, W. Currie, A. Johnson, W. Barry. **Not Pictured:** C. Baber, M. Bates, G. Baylin, E. Blackburn, J. Blackburn, W. Briner, B. Drayer, C. Easterling, W. Foster, H. Grossman, D. Heaston, L. Hedlund, R. Heinz, M. Korobkin, D. Osborne, L. Roberts, W. Thompson, R. Wilkinson.

Professor: Charles E. Putnam, M.D. (Texas, 1967), *Chairman.*

DIVISION OF IMAGING

Associate Professor: Carl E. Ravin, M.D. (New York, 1968), *Director.*

Professors: William F. Barry, Jr., M.D. (Pennsylvania, 1948); George Baylin, M.D. (Duke, 1937); James T.T. Chen, M.D. (Natl. Defense Med. Ctr., 1950); R. Edward Coleman, M.D. (Washington, 1968); Herman Grossman, M.D. (Columbia, 1953); E. Ralph Heinz, M.D. (Pennsylvania, 1955); Melvyn Korobkin, M.D. (Connecticut, 1967); Reed P. Rice, M.D. (Indiana, 1955).

Associate Professors: James D. Bowie, M.D. (Oklahoma, 1967); William H. Briner, B.S. (Temple, 1954); Richard H. Daffner, M.D. (Buffalo, 1969); Burton P. Drayer, M.D. (Illinois, 1971); Eric L. Effmann, M.D. (Indiana, 1967); John A. Gehweiler, M.D. (Duke, 1956); C. Craig Harris, M.S. (Tennessee, 1951); Ronald Jaszczak, Ph.D. (Florida, 1968); Donald R. Kirks, M.D. (Missouri, 1968); David F. Merten, M.D. (Cincinnati, 1948); Robert McLelland, M.D. (Cincinnati, 1948); Robert A. Older, M.D. (Duke, 1968); Thomas T. Thompson, M.D. (Med. Coll. of Virginia, 1964); William M. Thompson, M.D. (Pennsylvania, 1969); Robert H. Wilkinson, Jr., M.D. (Washington U., 1958); Joseph P. Workman, M.D. (Maryland, 1946).

Assistant Professors: Collins Baber, M.D. (Duke, 1973); Richard S. Breiman, M.D. (California, 1973); Nabil S. Dahmash, M.D. (Syria, 1973); Philip J. Dubois, M.D. (Australia, 1969); William Foster, Jr., M.D. (Duke, 1973); Michael D. Halber, M.D. (Colorado, 1971); Dennis Heaston, M.D. (Utah, 1975); Frederick M. Kelvin, M.D. (U. of London, 1966); Stephen H. Ladwig, M.D. (Illinois, 1972); Salutario Martinez, M.D. (Havana U., 1961); Steven R. Mills, M.D. (U.N.C. at Chapel Hill, 1972); Charles Nelson, Ph.D. (Ohio, 1973); Dennis R.S. Osborne, M.D. (London, 1967); Panol C. Ram, M.D. (India, 1968); Daniel C. Sullivan, M.D. (Vermont, 1970).

Associates: Elizabeth Blackburn, R.T., M.Ed. (Madison, 1954); Rita Kristina Gedgaudas (Minnesota, 1975); Arl Van Moore, M.D. (Arkansas, 1974); Barry Powers, M.D. (N.Y., 1975); Leroy Roberts, M.D. (Pennsylvania, 1975); Eric R. Rosenberg, M.D. (N.Y., 1975).

Research Associates: W. Milton Bates; Mark J. Engler, Ph.D. (C.C.N.Y., 1966); Lawrence W. Hedlund, Ph.D. (Pennsylvania, 1968).

DIVISION OF RADIATION BIOLOGY

Professor: Aaron P. Sanders, Ph.D. (U.N.C. at Chapel Hill, 1964), *Director.*

Associate Professor: William D. Currie, Ph.D. (U.N.C. at Chapel Hill, 1964).

Assistant Professors: Randy L. Jirtle, Ph.D. (Wisconsin, 1975); Raymond U, Ph.D. (Kyoto, Japan, 1970).

DIVISION OF RADIATION PHYSICS

Professor: Fearghus O'Foghludha, Ph.D. (Natl. U. of Ireland, 1961), *Director.*

Associate Professor: Farideh Bagne, Ph.D. (Pennsylvania, 1970).

Assistant Professor: G. Allan Johnson, Ph.D. (Duke, 1974).

Research Associate: James W. Blackburn.

DIVISION OF RADIATION THERAPY

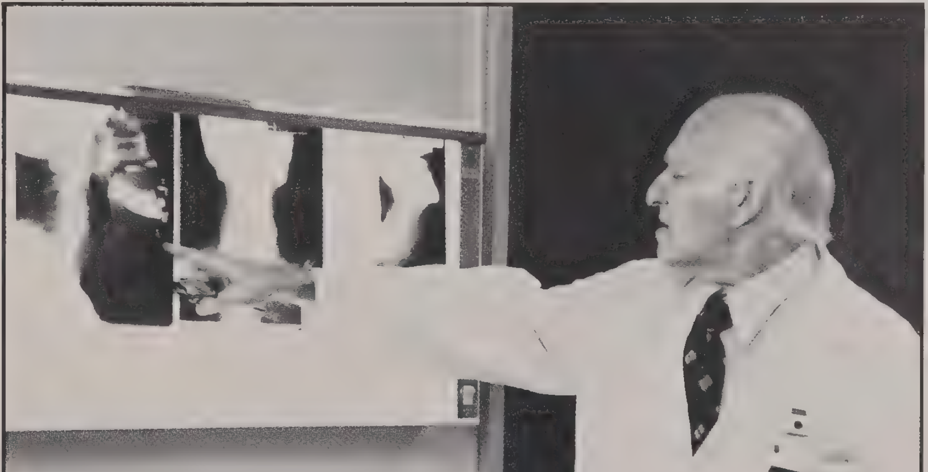
Assistant Professor: K.T. Noell, M.D. (Rochester, 1967), *Director.*

Associate Professors: Kent T. Woodward, M.D. (Med. Coll. of South Carolina, 1947), Ph.D. (Rochester, 1966); Boyd T. Worde, M.D. (Tennessee, 1947).

Assistant Professor: Robert I. Fishburn, M.D. (California, 1970.

D.F. Merten, M.D., and R. McLelland, M.D.

G. Baylin, M.D.

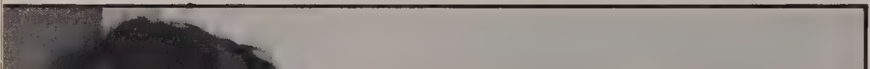


RADIOLOGY RESIDENTS

Row 1 (L to R): S. Martinez. **Row 2:** M. Deland, R. Schaaf, A. Fritz, T. McCook, C. Briley, L. Wolbarsht. **Row 3:** D. Duncan, S. Woodard, M. Warner, P. Nelson, R. Max, K. Williams, J. Ponzi, A. Beloni. **Row 4:** N. Frankel, P. Massey, B. Rodan, C. Suslavich, J. Edinger, D. Call, D. Warner. **Not Pictured:** J. Apple, J. Blum, S. Buff, G. Dixson, M. Hewitt, N. Jacobs, D. Johnson, B. Lamont, E. McClees, P. Miller, G. Newman, M. Neilson, M. Robinson, J. Scheuer, C. Stricker, F. Suslavich, D. Tempkin, R. Zeller.

Chief Residents: Jeffery Blum, M.D. (Maryland, 1973); Robert E. Schaaf, M.D. (Tufts, 1976).

Residents: Jerry Apple, M.D. (Duke, 1978); Andrew Beloni, M.D. (Rutgers, 1978); Clinton Briley, M.D. (North Carolina at Chapel Hill, 1977); Samuel Buff, M.D. (Duke, 1978); David Lee Call, M.D. (U.N.C. at Chapel Hill, 1977); Maitland Deland, M.D. (Florida, 1978); George Dixson, M.D. (Duke, 1976); Dale L. Duncan, M.D. (Univ. of S.C., 1979); James R. Edinger, M.D. (Coll. of Osteopathic Med. and Surg., Des Moines, 1976); Nicholas Frankel, M.D. (Virginia, 1975); Arthur Fritz, M.D. (U.N.C. at Chapel Hill, 1971); Michael Hewitt, M.D. (Rochester, 1978); Norman Jacobs, M.D. (Temple, 1978); Donald Johnson, M.D. (West Virginia, 1974); Barry M. Lamont, M.D. (McGill, 1977); Baikadi Madhava, M.D. (India, 1974); Eric McClees, M.D. (Duke, 1978); Thomas McCook, M.D. (Florida, 1978); Philip Massey, M.D. (Maryland, 1978); Richard Max, M.D. (Rutgers, 1977); Paul Miller, M.D. (New York Med. Coll., 1976); Pamela A. Nelson, M.D. (U.N.C. at Chapel Hill, 1977); Glenn Newman, M.D. (Duke, 1973); Marvin Nielson, M.D. (Jefferson, 1974); Joseph Ponzi, M.D. (New York, 1973); Margaret Robinson, M.D. (Washington Univ., 1977); Bruce Rodan, M.D. (Miami, 1976); James Scheuer, M.D. (Colorado, 1977); Charles Stricker, M.D. (Washington Univ., 1978); Catherine Suslavich, M.D. (Duke, 1977); Frank Suslavich, M.D. (Duke, 1977); David Tempkin, M.D. (Texas Southwestern, 1978); David Warner, M.D. (Northwestern, 1978); Mary Warner, M.D. (Northwestern, 1979); Kenneth Williams, M.D. (Duke, 1978); Lawrence Wolbarsht, M.D. (Tufts, 1975); Sabra Woodward, M.D. (U.N.C. at Chapel Hill, 1976); Robert G. Zeller, M.D. (Maryland, 1976).



F. Suslavich, M.D.

D. Warner, M.D.

SURGERY

David C. Sabiston, Jr., M.D.
Chairman

The Department of Surgery at Duke is composed of the Divisions of General and Thoracic Surgery, Neurosurgery, Orthopaedic Surgery, Otolaryngology, Plastic and Maxillofacial Surgery, and Urology. The primary goal of the Department is excellence in patient care using the most modern techniques and utilizing the most updated facilities in the management of all forms of surgical disorders. Considerable emphasis is also placed upon research, and forty members of the staff currently have their own research grants and contracts from the National Institutes of Health, the American Cancer Society, the American Heart Association, and other agencies. Last year a total of 117,686 patients were seen in the Surgical Outpatient Clinics, and 13,849 surgical operations were performed, including 489 open heart procedures. There are 71 members of the faculty, 133 members of the Resident Staff, and 22 Research Fellows.

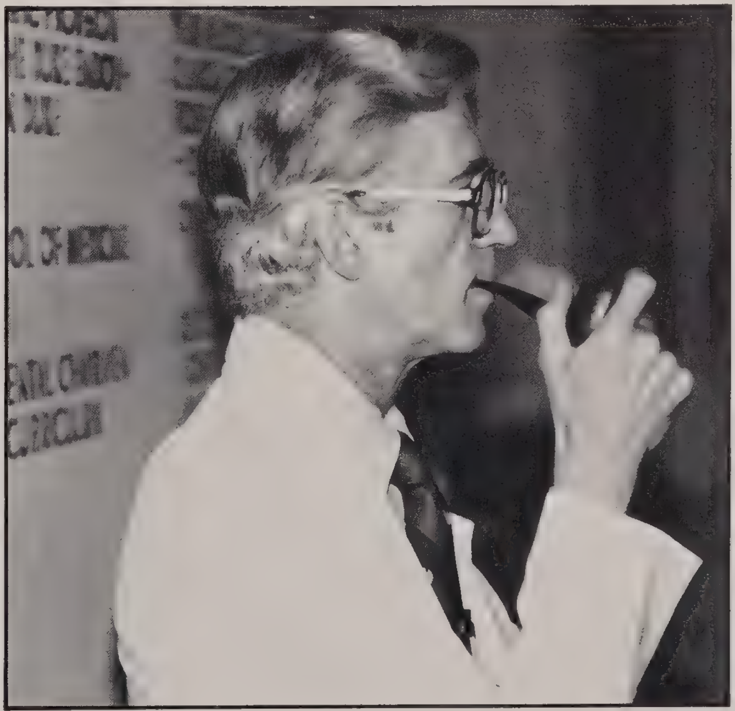
The Department owes much to its founder, Dr. Deryl Hart, the first Professor and Chairman of the Department, who laid a firm foundation in the selection of an outstanding faculty and resident staff over a twenty year period. Together with Drs. Frederic M. Hanes and Wilburt C. Davison, he was largely responsible for the formation of the Private Diagnostic Clinics at Duke, and the impact of this contribution has been of much benefit to the Medical Center and to the entire University. Moreover, the concept of providing excellence in medical care for patients while simultaneously yielding support for an academic Department has spread to other institutions. The Department honors its founder in the Annual Deryl Hart Lecture which is combined with a Visiting Professorship of Surgery. After serving as President of the University, Dr. Hart authored an excellent text on the development of the Department.

The second Professor and Chairman of the Department of Surgery, Dr. Clarence E. Gardner, furthered the original aims and accomplishments. Dr. Gardner was the first Chief Resident in Surgery at Duke and throughout his teaching career was regarded as a very able teacher. He is honored each year by the Department of Surgery and the Medical Center Library in the Clarence E. Gardner Lecture in the History of Surgery.

The curriculum for medical students includes the Required Course in Surgery (Year II), emphasizing the basic features which form the foundation of surgical diagnosis and treatment. Stress is placed upon those subjects which have their origin in objective laboratory and clinical documentation. These topics include the management of wounds, inflammation, shock, fluid and electrolyte balance, the metabolic response to trauma, the biology of neoplastic disease, gastrointestinal physiology and its derangements, and blood coagulation and thrombosis. These subjects are applicable to all forms of surgery including Neurosurgery, Orthopaedics, Otolaryngology, Plastic Surgery, Urology and, in fact, to the entire field of medicine. Seminars are given three times weekly by members of the faculty who are most familiar with the subject being presented. Throughout the Required Course, emphasis is placed upon personal study of the patient with presentations being made three times weekly at Teaching Rounds. In addition, Surgical Specialty Demonstrations are given in each of the major branches of surgery including Neurosurgery, Orthopaedics, Otolaryngology, Plastic and Reconstructive Surgery, and Urology. Sessions in Anesthesiology and Ophthalmology are also given during the Course.

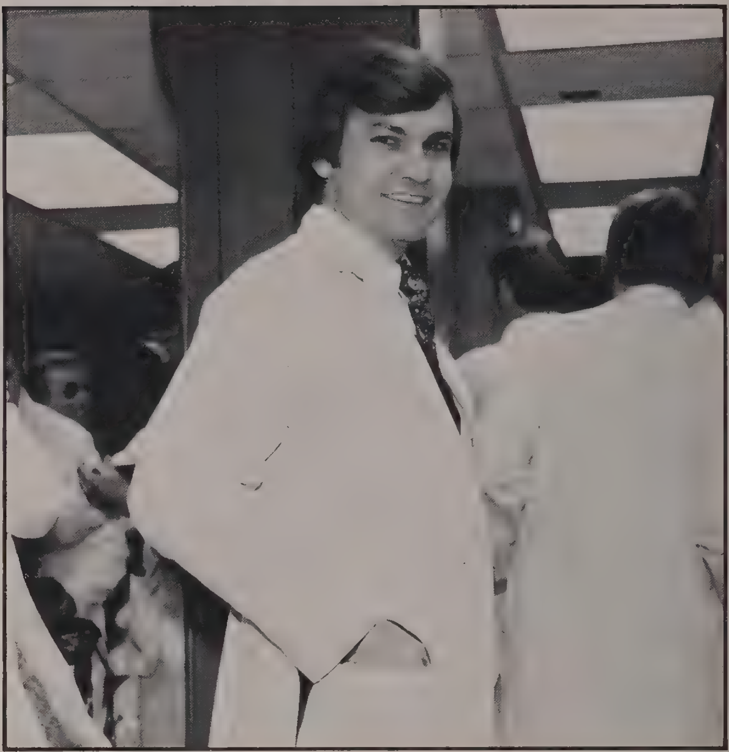
The purpose of the Required Course in Surgery is to prepare the student for some thirty elective courses offered by the Department of Surgery in Year IV. Since fourth year students are now performing at a level formerly achieved by interns, the experience in each surgical elective has become highly patient oriented.

In its Residency Training Program, the aim of the Department of Surgery is the creation of an environment in clinical and investigative surgery for students, residents, and faculty, Emphasis is placed upon thorough **clinical** training in the various surgical disciplines with exposure to large numbers of patients and to a wide variety of surgical problems. Simultaneously, all residents are encouraged to understand and appreciate the importance of clinical and laboratory **research** as an integral part of a contemporary training program. In addition to assignments at the Duke University Medical Center, residents also rotate through the Durham Veterans Administration Hospital, the Durham County General Hospital, the Oteen Veterans Administration Hospital, and the Womack Army Hospital at Fort Bragg. These additional hospitals add much to the number and variety of patients seen during the course of the residency program.



H.N. Oldham, Jr., M.D.

The Department of Surgery also conducts a large number of research programs both in General and Thoracic Surgery as well as in each of the Divisions. These include gastrointestinal research (Drs. R. Scott Jones, Onye E. Akwari, and John P. Grant), the basic cancer research program (Drs. Dani P. Bolognesi, Hilliard F. Seigler, and Samuel A. Wells, Jr.), the trauma program (Dr. Joseph A. Moylan), the role of radioisotopes in surgical diagnosis (Dr. Robert H. Jones), studies on the pulmonary circulation (Drs. David C. Sabiston, Jr., Walter G. Wolfe, and R.H. Jones), problems in peripheral vascular surgery (Dr. James C.A. Fuchs), cardiovascular research (Drs. D. Sabiston, James L. Cox, R.H. Jones, H. Newland Oldham, Jr., Will C. Sealy, Andrew S. Wechsler, W. Wolfe, and W. Glenn Young, Jr.), atherosclerosis research (Drs. Per-Otto Hagen and J. Fuchs), the transplantation program (Drs. D. Bernard Amos, R. Randal Bollinger, H. Seigler, Delford L. Stickel, and John L. Weinerth), surgical endocrinology (Drs. S. Wells and George S. Leight, Jr.), pediatric surgery program (Dr. Howard C. Filston), and the total parenteral nutrition program (Dr. J. Grant).

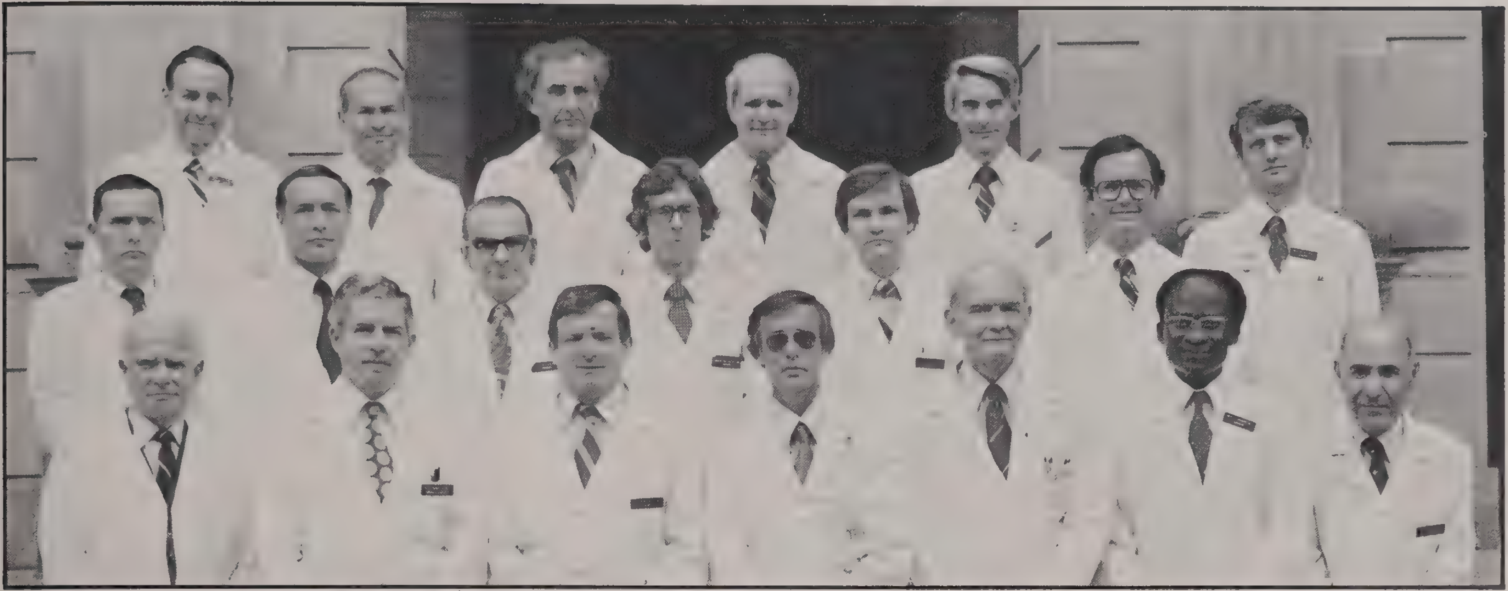


J. L. Cox, M.D.

S.A. Wells, Jr., M.D.

R.W. Postlethwait, M.D.

SURGERY FACULTY



Row 1 (L to R): W. Peete, G. Young, Jr., D. Sabiston, Jr., H. Seigler, W. Sealy, O. Akwari, W. Anlyan. **Row 2:** S. Jones, W. Wolfe, A. Langlois, A. Wechsler, J. Cox, J. Fuchs. **Row 3:** H. Filston, D. Bolognesi, P. Hagen, S. Wells, Jr., R. Jones, W. Dilley.

Professor: William W. Shingleton, M.D. (Bowman Gray, 1943), *Chief of Division of General Surgery.*

Professors: D. Bernard Amos, M.D. (Guy's Hospital, London, 1963), Experimental Surgery; William G. Anlyan, M.D. (Yale, 1949); Dani P. Bolognesi, Ph.D. (Duke, 1964), Experimental Surgery; Eugene D. Day, Ph.D. (Delaware, 1952), Experimental Surgery; R. Scott Jones, M.D. (Texas, 1961); H. Newland Oldham, Jr., M.D. (Baylor, 1961); William P.J. Peete, M.D. (Harvard, 1947); Raymond W. Postlethwait, M.D. (Duke, 1937); Will C. Sealy, M.D. (Emory, 1936); Hilliard F. Seigler, M.D. (U.N.C. at Chapel Hill, 1960); Delford L. Stickel, M.D. (Duke, 1953); Samuel A. Wells, Jr., M.D. (Emory, 1961); Walter G. Wolfe, M.D. (Temple, 1963); W. Glenn Young, Jr., M.D. (Duke, 1948).

Clinical Professor: Timothy Takaro, M.D. (New York University, 1943).

Associate Professors: Onyekwere Akwari, M.D. (Southern California, 1970); Darell D. Bigner, M.D. (Duke, 1965), Ph.D. (Duke, 1971), Experimental Surgery; Howard C. Filston, M.D. (Western Reserve, 1962); James C.A. Fuchs, M.D. (Johns Hopkins, 1964); Robert H. Jones, M.D. (Johns Hopkins, 1965); Joseph A. Moylan, Jr., M.D. (Boston, 1964); Wirt W. Smith, M.D. (Texas, 1951), Experimental Surgery; Andrew S. Wechsler, M.D. (State Univ. of New York, 1964).

Associate Medical Research Professor: Per-Otto F. Hagen, F.H.W.C. (Watt University, Edinburgh, Scotland, 1961), Experimental Surgery.

Associate Clinical Professors: James E. Davis, M.D. (Pennsylvania, 1943); William F. Hollister, M.D. (Duke, 1939); H. Max Schiebel, M.D. (Johns Hopkins, 1933); Stewart M. Scott, M.D. (Baylor, 1951); Gulshan K. Sethi, M.D. (All India, 1963).

Assistant Professors: Jeffrey J. Collins, Ph.D. (Harvard, 1972), Experimental Surgery; James L. Cox, M.D. (Tennessee, 1967); William Dilley, Ph.D. (California, 1970); John P. Grant, M.D. (Chicago, 1969); Darrow E. Haagensen, Jr., M.D. (Columbia, 1974), Experimental Surgery; George S. Leight, Jr., M.D. (Duke, 1972); Philip D. Lumb, M.B.B.S. (London Univ. School of Med., 1974); Alfred P. Sanfilippo, M.D. (Duke, 1976), Experimental Surgery; Gary M. Stuhlmiller, Ph.D. (Duke, 1976), Experimental Surgery; Frances F. Ward, Ph.D. (Brown, 1965), Experimental Surgery.

Assistant Medical Research Professors: John C. Cambier, Ph.D. (Iowa, 1975); Barbara Kitchell, Ph.D. (Duke, 1974); Elmer J. Rauckman, Ph.D. (Duke, 1975).

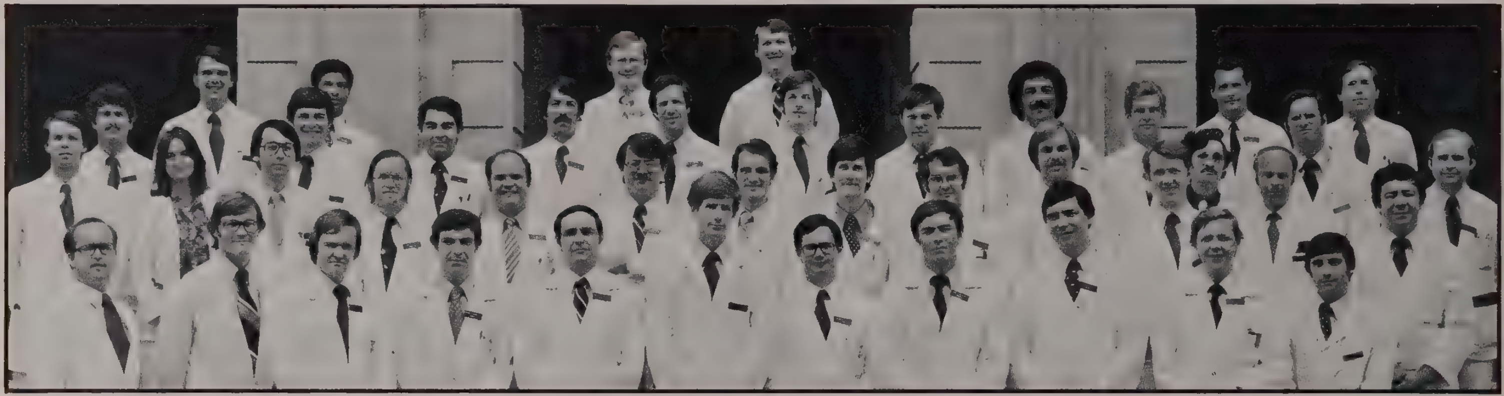
Assistant Clinical Professors: Albert H. Bridgman, M.D. (Louisiana, 1956); Rollins S. Burhans, Jr., M.D. (Louisville, 1963); Gordon M. Carver, M.D. (Duke, 1948); John M. Cheek, Jr., M.D. (Bowman Gray, 1945); John T. Daniels, M.D. (Howard, 1964); Thomas J. Enright, M.D. (Buffalo, 1948); William B. Hall, Jr., M.D. (Med. Coll. of Virginia, 1954); Alphonse J. Langlois, Ph.D. (Duke, 1966); Walter J. Loehr, M.D. (Cornell, 1963); F. Maxton Mauney, Jr., M.D. (Duke, 1959); W.B. McCutcheon, Jr., M.D. (Virginia, 1952); Amir A. Neshat, M.D. (Isfahan University, Iran, 1960); E. Wilson Staub, M.D. (Northwestern, 1957); Douglas H. Stone, M.D. (Harvard, 1937); David W. Vaughn, B.S. (New York State University, 1978); Charles D. Watts, M.D. (Howard, 1943); Daivd K. Wellman, M.D. (Duke, 1971); James S. Wilson, M.D. (Duke, 1937).

Clinical Associates: Ray A. Ashcraft, B.S. (North Texas State, 1958), D.D.S. (Baylor, 1963), Dentistry; Thomas A. Ferretti, D.D.S. (U.N.C. at Chapel Hill, 1976); Robert N. Hunter, D.D.S. (U.N.C. at Chapel Hill, 1977), Dentistry.

Research Associates: Paul Hendrix, B.S. (College of Charleston, 1970), B.H.S. (Duke, 1975); Gudron Huper, M.A. (Stuttgart, Germany); Thomas J. Matthews, Ph.D. (Missouri, 1971); Anthony V. Seaber; Karin S. Thiel, Ph.D. (Duke, 1977).

D.C. Sabiston, Jr., M.D.

GENERAL AND THORACIC SURGERY RESIDENTS



Row 1 (L to R): K. Rankin, P. Thurlow, S. Mills, N. Silverman, J. Alexander, W. DeVries, L. Harrison, Jr., B. Smith, G. Leight, Jr., D. Andersen, A. Ross. **Row 2:** H. Tiller, Jr., S. Tucker, T. Spray, P. Smith, R. Bollinger, R. Wesly, C. Olsen, D. Iglehart, R. Hopkins, M. Bolman, G. Parker, R. Howe, J. Sink. **Row 3:** E. Epstein, B. Schirmer, B. Hodge, M. Williams, R. Ungerleider, R. Jones, R. Chitwood, V. Mosca, D. Jones, R. McCann, W. Meyers, E. Austin. **Row 4:** D. Drvaric, J. Douglas, Jr., C. Cox, T. Novick, T. Nesbitt, Jr., G. Tyson, Jr.

Instructors and Teaching Scholars: John C. Alexander, Jr., M.D. (Duke, 1972); Stephen A. Mills, M.D. (McGill, 1971); Norman A. Silverman, M.D. (Boston University, 1971).

Instructors and Chief Residents: R. Randal Bollinger, M.D. (Tulane, 1970), Ph.D. (Duke, 1977); R. Morton Bolman, III, M.D. (St. Louis, 1973); W. Robins Howe, M.D. (Yale, 1971); James E. Lowe, M.D. (California at Los Angeles, 1973); George A. Parker, M.D. (Boston University, 1972); J. Scott Rankin, M.D. (Tennessee, 1969).

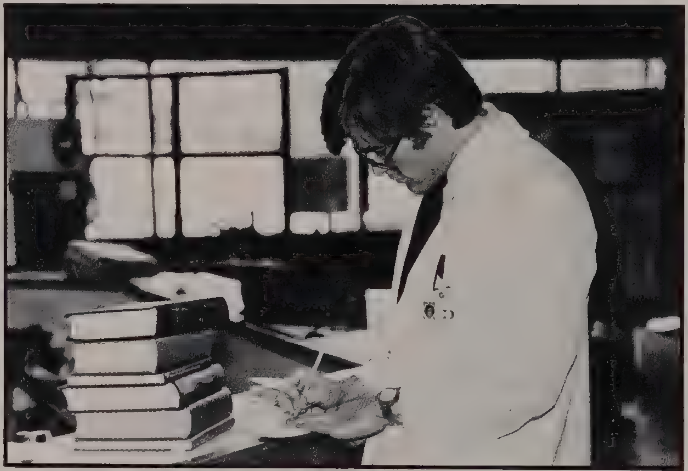
Fellows: Koho Akimaru, M.D. (Nippon Medical School, 1971); Dana K. Andersen, M.D. (Duke, 1971); Erle H. Austin, M.D. (Harvard, 1974); Stefan Chylinski, M.D. (Medical School in Lodz, 1967); John R. Farndon, M.B.B.S. (University of Newcastle upon Tyne, 1978); John B. Hanks, M.D. (Rochester, 1973); J. Dirk Iglehart, M.D. (Harvard, 1975); Robert N. Jones, M.D. (Rush Medical College, 1976); Ka-Hei Leong, M.D. (Taiwan, 1970); Gary K. Lofland, M.D. (Boston University, 1975); Craig O. Olsen, M.D. (Utah, 1976); Claude A. Peter, M.D. (Strasbourg, 1972); Robert B. Peyton, M.D. (New York University, 1977); John S. Silva, M.D. (George Washington University, 1974); Bruce M. Smith, M.D. (Harvard, 1971); Peter M. Thurlow, M.D. (Harvard, 1977); Ross M. Ungerleider, M.D. (Chicago, 1977); Peter Van Trigt, M.D. (Tulane, 1977); Zhong-gao Wang, M.D. (Shanghai First Medical College, 1961); J. Mark Williams, M.D. (Duke, 1976).

Senior Assistant Residents: L. George Alexander, M.D. (Duke, 1973); W. Randolph Chitwood, Jr., M.D. (Virginia, 1974); Charles E. Cox, M.D. (Utah, 1975); Charles H. Edwards, II, M.D. (U.N.C. at Chapel Hill, 1973); W. Peter Graper, M.D. (McMaster, 1973); Ronald C. Hill, M.D. (West Virginia, 1974); Walter D. Holder, Jr., M.D. (U.N.C. at Chapel Hill, 1971); Richard A. Hopkins, M.D. (Duke, 1974); Richard M. Larson, M.D. (Duke, 1974); Thomas H. Marsicano, M.D. (Ohio State, 1973); Richard L. McCann, M.D. (Cornell, 1974); William C. Meyers, M.D. (Columbia, 1975); Jon F. Moran, M.D. (Washington University, 1973); Jeffrey A. Norton, M.D. (Upstate Medical, Syracuse, 1973); Stephen K. Rerych, M.D. (Columbia, 1974); Lary A. Robinson, M.D. (Washington University, 1972); Arthur Ross, III, M.D. (Case Western Reserve, 1975); Worthington G. Schenk, M.D. (Duke, 1974); Peter M. Scholz, M.D. (Basel, 1970); James D. Sink, M.D. (Bowman Gray, 1975); Peter K. Smith, M.D. (Duke, 1977); Thomas L. Spray, M.D. (Duke, 1974); Robert L.R. Wesly, M.D. (Duke, 1975).

Assistant Residents: David M. Drvaric, M.D. (Emory University, 1978); Richard D. Floyd, M.D. (Duke, 1978); William L. Holman, M.D. (Cornell, 1978); Vincent S. Mosca, M.D. (Rochester, 1978); Tom E. Nesbitt, M.D. (Georgetown University, 1978); Thomas L. Novick, M.D. (Duke, 1978); Kevin P. Rankin, M.D. (Temple University, 1978); Mark J. Schacht, M.D. (Michigan, 1978); Bruce Schirmer, M.D. (Duke, 1978); Wendell H. Tiller, M.D. (Duke, 1978); George S. Tyson, M.D. (Duke, 1978).

First Year Residents: Samuel I. Brown, M.D. (Virginia, 1979); Todd M. Chapman, M.D. (Bowman Gray, 1979); Gordon M. Clark, M.D. (Tulane, 1979); Charles J. Devine, III, M.D. (Eastern Virginia, 1979); James M. Douglas, Jr., M.D. (Duke, 1978); John H. Farrer, M.D. (U.C.S.D., 1979); Thomas B. Ferguson, Jr., M.D. (St. Louis, 1979); Gerald S. Gussack, M.D. (Georgia, 1979); Warren J. Kortz, M.D. (Colorado, 1979); Steven R. McCoy, M.D. (Duke, 1979); Eric R. Oser, M.D. (L.S.U., 1979); Richard J. Peterson, M.D. (Mayo Medical School, 1979); Douglas S. Reintgen, M.D. (Duke, 1979); Laurence H. Ross, M.D. (Case Western Reserve, 1979); Richard L. Wolman, M.D. (University of New York, 1979).

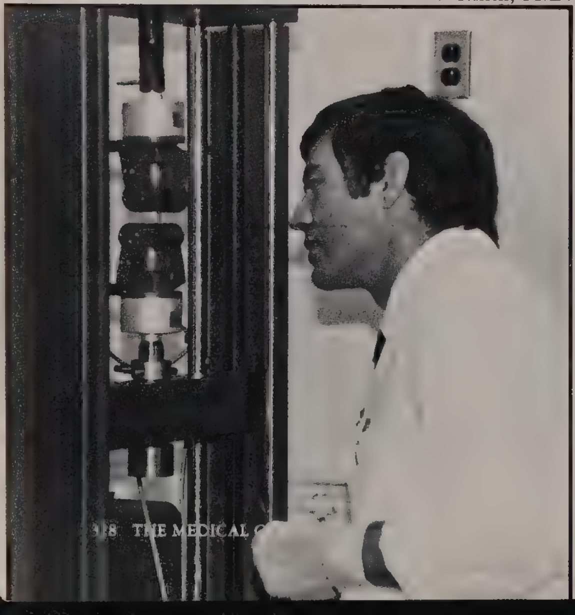
W.G. Shenk, M.D.



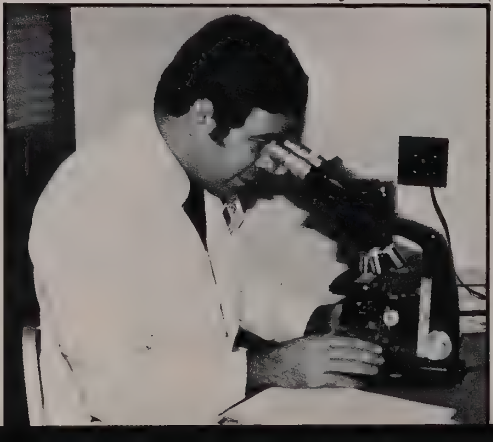
P.M. Thurlow, M.D.

T.H. Marsicano, M.D.

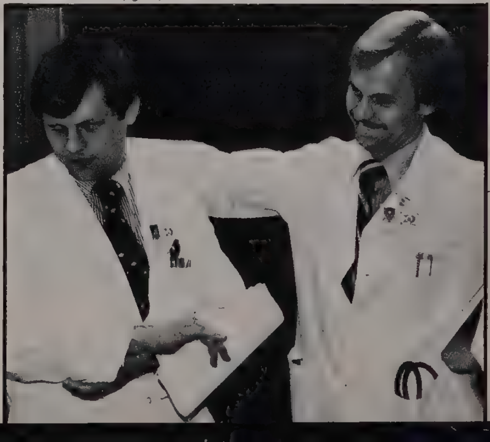
B.M. Smith, M.D.



J.D. Sink, M.D.



R. Chitwood, Jr., M.D. and R. Bolman, III, M.D.



NEUROSURGERY

Robert H. Wilkins, M.D.
Chief

Duke Hospital was opened on Monday, July 21, 1930. The 73rd patient to register presented a neurosurgical problem — headaches and papilledema. Dr. Deryl Hart, the first Professor of Surgery at Duke, performed a ventriculogram on July 24 and then resected a cystic glioma of the right frontal lobe two days later. From 1930 to 1937, Dr. Hart and Dr. Clarence Gardner performed the neurosurgical procedures at Duke Hospital in addition to their other surgical responsibilities.

Dr. Barnes Woodhall came to Durham in September, 1937, from the Johns Hopkins Hospital to head up the first surgical specialty service at Duke. In 1942, Dr. Woodhall left for military service to become Chief of Neurosurgery at the Walter Reed General Hospital in Washington, D.C. Fortunately, Dr. Guy Odom was recruited by Dr. Hart and joined the staff in 1943. When Dr. Woodhall returned to Durham in 1946, he and Dr. Odom began their long and productive association.

During World War II, two men, Dr. Robert Neill and Dr. Frederic Kristoff, served as neurosurgical residents at Duke Hospital. Beginning in 1946, Drs. Woodhall and Odom accepted one new individual each year for neurosurgical training, and by 1949, they had established a five-year residency program. The residency was enlarged further with the acceptance of either one or two residents per year starting in 1965. Of the forty-four men who have completed residency training in the Division of Neurosurgery, twenty-two have spent a significant period in academic practice, and eight have become chiefs of neurosurgical residency training programs.

Dr. Odom established a neuropathology laboratory in 1946 and for thirty-five years personally instructed each resident in neurosurgical pathology. In the process he accumulated the paraffin blocks, slides, and typed descriptions of more than 5,300 surgical specimens, most of them brain tumors. Over the years Drs. Woodhall and Odom not only ran a busy clinical service and a first-rate residency training program, but also conducted a variety of research projects, many of which concerned intracranial aneurysms or brain tumors. During the twenty-five years between 1946 and 1970, the two men produced 196 medical publications.

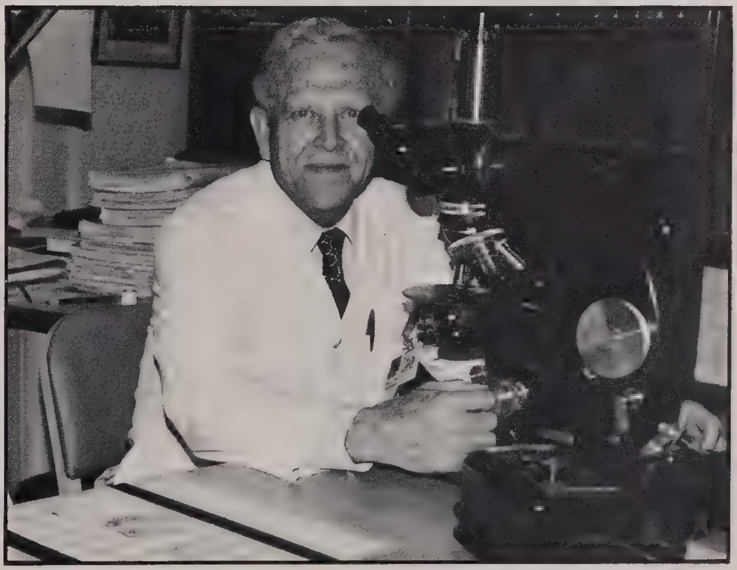
Dr. Blaine Nashold joined the neurosurgical faculty in 1957, and since then eight other individuals have been added to the senior staff: Dr. George Tindall (1961-1968), Dr. Stephen Mahaley (1965-1977), Dr. Robert Wilkins (1968-1972; 1976-present), Dr. Wesley Cook (1971-present), Dr. Richard Kramer (1972-present), Dr. Robert Wilfong (1975-1977), Dr. Edward Ganz (1977-present), and Dr. Jerry Oakes (1978-present). Dr. Odom followed Dr. Woodhall as Chief of the Division in 1960, and Dr. Wilkins succeeded Dr. Odom in 1976.

The Division of Neurosurgery maintains active clinical services at Duke Hospital and the Durham V.A. Hospital and is currently negotiating a resident rotation at the Durham County General Hospital. On a broad base of general neurosurgical activity, the interests of the individual staff neurosurgeons have added extra dimensions in certain areas. Dr. Blaine Nashold, for example has long been active in the field of functional neurosurgery and recently was President of the World Society for Stereotactic and Functional Neurosurgery. The Division of Neurosurgery runs clinics for patients with brain tumors and subarachnoid hemorrhage and takes part with physicians from other disciplines in clinics for patients with pain, myelodysplasia, and craniofacial anomalies. Dr. Wesley Cook is a key component of a cooperative effort concerned with the care of patients with spinal cord injuries; Dr. Richard Kramer has been conducting research concerning the effects of ischemia on cerebral metabolism. Dr. Jerry Oakes devotes his time to pediatric neurosurgery; Dr. Robert Wilkins edits the monthly journal, *Neurosurgery.*

The Duke neurosurgical residency now entails a five or six year program following one year of general surgical training; there are openings for two candidates per year. Three years are devoted to clinical neurosurgery, one or two years are spent in laboratory activities, and another year is dedicated to neurology and allied subjects. Supervision in the clinical years includes daily rounds on all patients by the senior staff. All neuroradiological studies are reviewed with the neuroradiology staff each day. Neurosurgery clinics are held on each week day. There are weekly conferences in the areas of neurology, neuropathology, and neurosurgery.

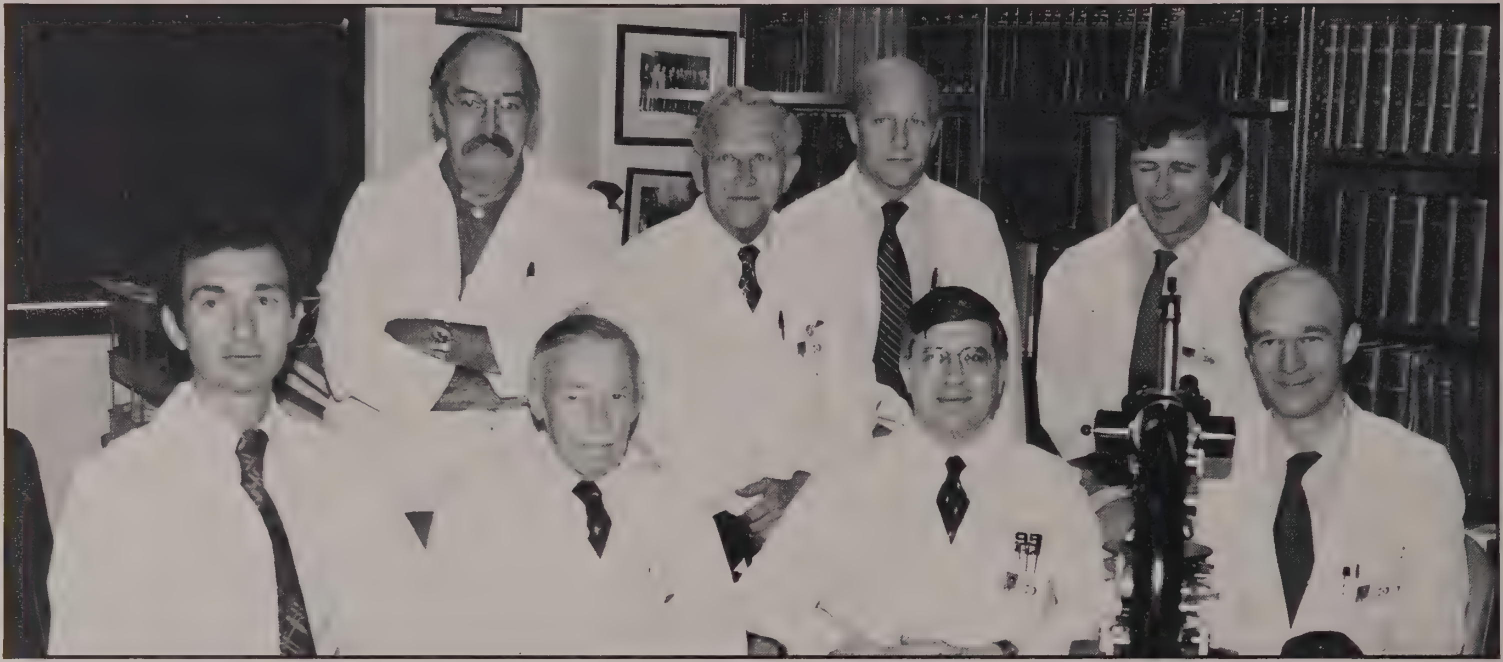
The Division of Neurosurgery also participates in medical student instruction. A six lecture series is part of the second year Surgery rotation. Three advanced courses are offered for students with a career interest in the neurological sciences: two clinical rotations and a course in investigative neurosurgery.

The Division anticipates the move to Duke North, where Neurosurgery and Neurology are to share a common floor of eighty beds. It is anticipated that this move will facilitate the continuing cooperative development of the clinical neurosciences at Duke.

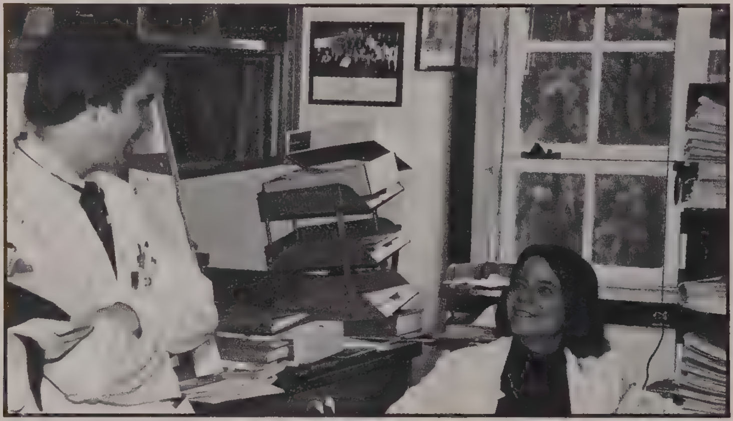


G.L. Odom, M.D.

NEUROSURGERY FACULTY



Row 1 (L to R): E. Ganz, B. Woodhall, R. Wilkins, J. Oakes. **Row 2:** B. Nashold, Jr., G. Odom, R. Kramer, W. Cook, Jr.



A. Higgins, M.D., and E. Bullitt, M.D.

Professor: Robert H. Wilkins, M.D. (Pittsburgh, 1959), *Chief.*

James B. Duke Professor: Guy L. Odom, M.D. (Tulane, 1933).

Professor: Blaine S. Nashold, M.D. (Louisville, 1949).

Associate Professor: Wesley A. Cook, Jr., M.D. (Oregon, 1963).

Assistant Professors: Edward Ganz, M.D. (Chicago, 1967); W. Jerry Oakes, M.D. (Duke, 1972); Bruno J. Urban, M.D. (Germany, 1960).

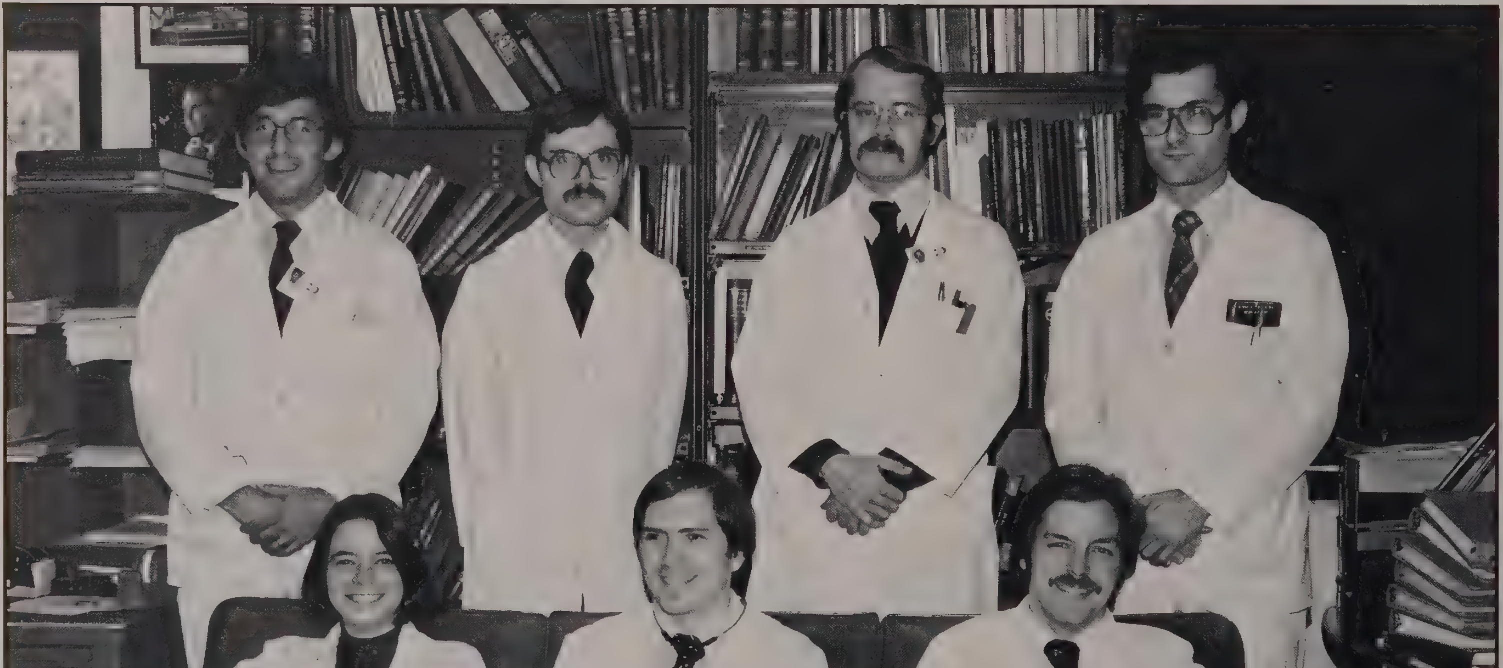
Assistant Clinical Professors: Walter S. Lockhart, M.D. (Bowman Gray, 1944); Robert E. Price, Jr., M.D. (U.N.C. at Chapel Hill, 1964).

Associate: Richard S. Kramer, M.D. (Duke, 1962).

Instructors and Chief Residents: Allan H. Friedman, M.D. (Illinois, 1974); John B. Mullen, M.D. (South Illinois, 1975).

Assistant Residents: James Blue, M.D. (Georgia, 1975); Bennett Blumenkopf, M.D. (Boston University, 1976); Dennis E. Bullard, M.D. (St. Louis, 1975); Elizabeth Bullitt, M.D. (Colorado, 1975); Kimball S. Fuiks, M.D. (Connecticut, 1978); Alfred C. Higgins, M.D. (Georgetown, 1977); George Vavoulis, M.D. (Minnesota, 1977).

NEUROSURGERY RESIDENTS



Sitting (L to R): E. Bullitt, A. Higgins, K. Fuiks. **Standing:** J. Blue, A. Friedman, J. Mullen, G. Vavoulis. **Not Pictured:** D. Bullard, B. Blumenkopf.

ORTHOPAEDICS

J. Leonard Goldner, M.D.
Chief

The Division of Orthopaedic Surgery was organized in 1935 by Alfred Shands, Jr., M.D. Dr. Shands was Chief of the Service for about two years when he resigned to become Director of the Alfred I. duPont Institute in Wilmington, Delaware, where he remained for his entire Orthopaedic career.

In 1937 Lenox D. Baker, M.D., was appointed Chief of the Orthopaedic Service and held this position until 1967. During this time, affiliated institutions were added to the Duke program so that the four residents appointed each year would have a wide experience. Dr. Baker was responsible for the addition of the North Carolina Cerebral Palsy Hospital to the Duke campus. His interest in sports medicine, arthritis, teaching, and further establishment of outlying clinics attended by Duke staff were activities that were evident during his active career.

R. Beverly Raney, M.D., joined the Orthopaedic staff in 1939 and participated in clinical work at Duke and Watts Hospital. Dr. Raney left Duke to become Chief of Orthopaedics at the University of North Carolina, where he remained until his recent retirement.

J. Leonard Goldner, M.D., who joined the Orthopaedic staff in 1950, was responsible for organizing the Orthopaedic Hand Service and maintained an active interest in classification and treatment of congenital talipes equinovarus (clubfeet) and other foot deformities in both children and adults. This work has culminated in the operative treatment of each true clubfoot at three months of age with significant improvement in the overall management of this condition. The Orthopaedic Hand Service has grown and over twenty-five Hand Fellows have been trained at Duke during the past twelve years. Research projects concerned with nerve entrapment syndromes, peripheral nerve regeneration, reconstruction of the upper extremity in cerebral palsy are a few of his major interests. Under his direction, the total number of residents increased to thirty-two, with several clinical and research fellows. Emphasis is on clinical practice, but each resident participates in a clinical and/or laboratory research project.

Frank Clippinger, M.D., joined the Orthopaedic staff in 1957. He has been involved with amputee patients, prosthetics and orthotics, and peripheral nerve sensory feedback implants for amputees affecting both the upper and lower extremities. Currently he is Director of Rehabilitation at Duke in addition to his Orthopaedic activities.

Donald McCollum, M.D., has been a member of the Duke staff since 1962. His current investigations are concerned with clinical and laboratory studies related to joint replacement. His major efforts are directed toward managing patients with clinical diagnosis of arthritis and in attempting to salvage joints that are painful and functioning inadequately.

Frank Bassett, III, M.D., is in charge of the Sports Medicine section and shares Directorship of the Scoliosis Clinic. He activated arthroscopy of the knee and other joints several years ago, and this clinical and research project continues. He has interest in conditioning of athletes, studies of injuries of college, high school, and professional team players, and other investigations as they relate to running injuries.

James Urbaniak, M.D., became the sixth geographic full-time member of the Duke staff in July of 1969. He has been responsible for organizing the microsurgical clinical and training program at Duke and in this field is involved in several clinical and laboratory projects related to anticoagulation, repair of vessels smaller than one millimeter, vessel grafting, composite tissue transfers, and vascularized bone grafts. He is Director of the Orthopaedic Research Laboratories and in this position works closely with the Microvascular Fellows assigned to Orthopaedics as well as in the clinical fields. Anthony Seaber, Research Associate, is coordinator of the laboratory research.

John Harrelson, M.D., joined the Duke staff in 1973 and brought with him an intense interest in Orthopaedic oncology which he acquired during his residency training at Duke. He is in charge of Orthopaedic oncology and is working closely with his colleagues in adult and pediatric hematology in combining surgical treatment with chemotherapy. He is also in charge of the bone laboratory, one of the few in this country, in which bone labeling, microradiography and the effect of various pharmacologic deficiencies on bone or vascular insufficiencies as they relate to bone are studied.

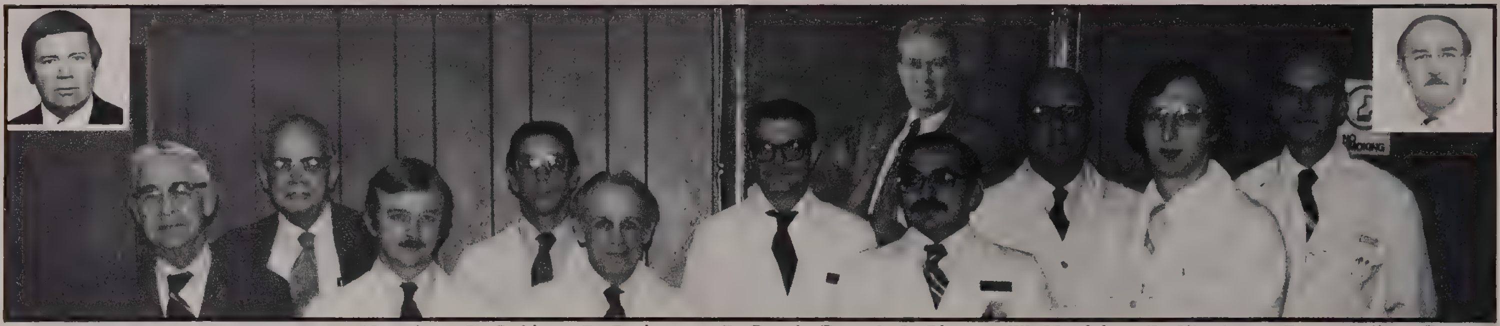
Robert Ruderman, M.D., has a joint appointment in Pediatrics as well as in Orthopaedics. His projects concern infants and children with genetic problems, for which reason he cooperates with members of the Immunology and Genetic Department directed by Dr. Bernard Amos. Dr. Ruderman also has organized and supervises an insensitive foot clinic in order to provide both clinical service and research related to this subject.

William Hardaker, M.D., joined the staff in July, 1979, with an interest in all aspects of the musculoskeletal system. He is currently involved with the operative procedures of the knee joint through the arthroscope, scoliosis, trauma, foot surgery, and general orthopaedics.

Two new additions will be added to the staff as of March 1, 1980. Andrew Koman, M.D., will be participating in general orthopaedics and microvascular surgery as a part of the Reimplantation Team. Dr. Koman completed his training at Duke and is involved in projects concerned with clinical compartment syndromes and thrombosis of the ulnar artery. James Nunley, M.D., is also participating in general orthopaedics, microvascular surgery reimplantation, and trauma of the spine and extremities.

The strong input of this full-time staff is complemented by several affiliated centers directed by dedicated individuals working with the Duke Orthopaedic Residents away from the Medical Center. The Orthopaedic Department of Durham County General Hospital is under the direction of Ralph Coonrad, M.D. The Durham Veterans Administration Hospital has an active Orthopaedic service attended by several members of the staff at Duke, and others provide regular consultation. The Shriners Hospital for Crippled Children in Greenville, South Carolina, under the direction of Leslie Meyer, M.D.,

ORTHOPAEDIC FACULTY



Row 1 (L to R): E. Bugg, Jr., J. Harrelson, L. Goldner, R. Ruderman, R. Bruch. **Row 2:** J. Glasson, W. Hardaker, F. Clippinger, D. McCollum, R. Coonrad. **Inset:** J. Urbaniak, F. Bassett, III.

provides complementary pediatric Orthopaedic training for two Duke residents on a consecutive basis. The Shriners Hospital in Erie, Pennsylvania, directed by Karl Frankovitch, M.D., provides two six-month rotations each year for two Orthopaedic Residents. The Asheville Veterans Administration Hospital provides valuable clinical experience for two Residents; the program is directed by Drs. George Jonas and Eugene Zorn. The clinical and research activities at Duke and at the affiliated locations provide the residents with a wide base of experience both in clinical and laboratory work.

The members of the Orthopaedic Division cooperate closely with physician's associates, physical therapists, occupational therapists, nursing service, operating room personnel, and clinic and hospital administration representatives. The Duke Prosthetic and Orthotics Department, directed by David Vaughn, is an integral part of the Orthopaedic management of patients with musculoskeletal problems.

The Orthopaedic staff has been responsible for outreach clinics since 1935. The number of clinics has increased as the need for clinics in many communities has occurred. On a monthly basis, certain members of the senior staff, accompanied by residents as a part of their training, visit Fort Bragg, Lumberton, McCain, Goldsboro, O'Berry Center, Seymour Johnson Air Force Base, Greensboro, Wilson, Clinton, Morehead City, Ahoskie, and Asheboro.

The Orthopaedic staff will continue to provide residents with high quality training and patients with the best care available in all aspects of the musculoskeletal system.

James B. Duke Professor: J. Leonard Goldner, M.D. (Nebraska, 1943), *Chief.*

Professors: Frank H. Bassett, III, M.D. (Louisville, 1957); Frank W. Clippinger, M.D. (Washington, 1952); Donald E. McCollum, M.D. (Bowman Gray, 1953); James R. Urbaniak, M.D. (Duke, 1962).

Associate Professor: William D. Gentry, Ph.D. (Florida, 1969).

Associate Clinical Professors: Everett I. Bugg, Jr., M.D. (Johns Hopkins, 1937); Ralph W. Coonrad, M.D. (Duke, 1947); John Glasson, M.D. (Cornell, 1943); Frank H. Stelling, III, M.D. (Georgia, 1938).

Assistant Professors: William T. Hardaker, M.D. (Duke, 1973); John M. Harrelson, M.D. (Duke, 1964); Louis A. Koman, M.D. (Duke, 1974); James A. Nunley, II, M.D. (Tulane, 1973); Robert J. Ruderman, M.D. (Rochester, 1968).

Assistant Clinical Professors: J. Lawrence Frank, M.D. (Duke, 1965); J. George Jonas, M.D. (Zurich, 1954); Stephen N. Lang, M.D. (Illinois, 1965); C. Robert Lincoln, M.D. (Med. Coll. of Virginia, 1960); Angus M. McBryde, Jr., M.D. (Duke, 1963); William S. Ogden, M.D. (Med. Coll. of Georgia, 1965); Eugene L. Zorn, M.D. (New York Med. Coll., 1941).

Clinical Associates: Albert T. Jennette, M.D. (U.N.C. at Chapel Hill, 1959); Leslie C. Meyer, M.D. (Nebraska, 1943); Ronald A. Pruitt, M.D. (Med. Coll. of Virginia, 1959).

Clinical Instructor: William J. Callison, M.D. (Vanderbilt, 1953).

Instructors and Chief Residents: Hendrick J. Arnold, M.D. (Tulane, 1971); Josephus T. Bloem, M.D. (Leidon University, 1974); Ali A. Dini, M.D. (Paylavi University, 1971); Todd B. Orvald, M.D. (Jefferson, 1971); Roni Sehayik, M.D. (Upstate Medical, Syracuse, 1974); Fredric H. Warren, M.D. (Arkansas, 1971); Peter W. Whitfield, M.D. (George Washington, 1974).

Assistant Residents: Ned B. Armstrong, M.D. (Jefferson, 1977); James Aronson, M.D. (University of Pittsburgh, 1975); Stephen F. Beissinger, M.D. (Pittsburgh, 1975); William R. Bell, M.D. (Albany Medical College, 1974); David H. Bristow, M.D. (Medical College of Virginia, 1971); Donald K. Bynum, M.D. (Texas at Houston, 1976); Robert D. Fitch, M.D. (Duke, 1976); Jacqueline M. Fogarty, M.D. (Albany, 1974); Frank B. Fondren, Jr., M.D. (U.N.C. at Chapel Hill, 1974); Robert D. Francis, M.D. (Duke, 1977); William E. Garrett, Jr., M.D. (Duke, 1976); Christopher M. Jobe, M.D. (Baylor, 1975); Larry G. Lipscomb, M.D. (Louisiana State University, 1975); Stephan B. Lowe, M.D. (U.N.C. at Chapel Hill, 1976); Carey W. McKain, M.D. (Duke, 1976); Stephen Milliner, M.D. (University of Witwatersrand, 1969); Ronald J. Neimkin, M.D. (Cornell, 1975); Elizabeth D. Quinlan, M.D. (Loyola, 1974); William O. Reed, Jr., M.D. (Missouri, 1977); Guy L. Rutledge, III, M.D. (Alabama, 1975); Sami Sehayik, M.D. (Buffalo, 1970); Christopher E. Smith, M.D. (Duke, 1976); William A. Somers, M.D. (Duke, 1972); Paul V. Spiegl, M.D. (Wisconsin, 1976); Peter J. Van Giesen, M.D. (Temple, 1971); W. Timothy Ward, M.D. (Pittsburgh, 1977); William N. Wessinger, M.D. (South Carolina, 1973).

ORTHOPAEDIC RESIDENTS

Row 1 (L to R): J. Bloem, R. Sehayik, P. Whitfield, A. Dini, H. Arnold, F. Warren, T. Orvald. **Row 2:** D. Bristow, S. Lowe, R. Neimkin, W. Garrett, J. Aronson, D. Quinlan, S. Milliner, N. Armstrong, J. Fogarty, R. Fitch. **Row 3:** P. Van Giesen, C. McKain, P. Spiegl, S. Beissinger, T. Ward, G. Rutledge, R. Francis, W. Bell.

OTOLARYNGOLOGY

William R. Hudson, M.D.
Chief

Until 1957 otolaryngology and ophthalmology were combined services at Duke. Advances in both specialties demanded separation of the services. Dr. Watt Eagle, one of the original faculty members at Duke, was the initial Chief of the Division of Otolaryngology. He, along with his associate Dr. Ralph Arnold, initiated the residency program in otolaryngology. Dr. William R. Hudson was appointed to the staff in 1961 following the death of Dr. Arnold. In 1965 Dr. Eagle retired from his administrative post and was succeeded by Dr. Hudson.

The clinical staff has been expanded, initially by the addition of Dr. Patrick Kenan. Later, Dr. Boyce Cole and Dr. Joseph Farmer were appointed. The Otolaryngology Research Laboratory was developed in the mid-sixties. This facility is now located in the Sands Building and is under the able direction of Dr. John Casseday.

Recognizing the need to improve patient care, the Division of Otolaryngology developed a radiographic suite named in honor of Dr. Ralph Arnold. This unit is under the direction of Dr. George Baylin who has a joint appointment in the Division of Otolaryngology and the Department of Radiology.

Our residency program was expanded and currently three residents are appointed at each level. Two years of general surgery are required prior to entering the program. The Duke University Medical Center is the focus of the program with satellite programs at the Durham V.A. Hospital, Asheville V.A. Hospital and McPherson Hospital. These hospitals provide a base for clinical and research training in the broad field of otolaryngology. Medical students are exposed to the specialty through a series of lectures and electives. Many of the problems encountered in otolaryngology are seen by the primary care physician. Students interested in primary care areas should strongly consider one of the electives offered by the service.

In addition to the management of general problems related to otolaryngology, the following special interests have been developed:

An interdisciplinary approach to the management of head and neck tumors has been developed. Dr. Cole is the primary representative from otolaryngology. The combined modalities of surgery, radiation therapy and chemotherapy in the management of head and neck cancer are being assessed through this program, and encouraging results are being obtained.

Auditory and vestibular problems are commonly seen in the patient population presenting to the otolaryngology clinic. In close association with the Center for Speech and Hearing Disorders, a variety of diagnostic tests are available including audiometry, impedance studies, brain stem evoked responses and electronystagmography. These diagnostic tools are of utmost importance in the evaluation and management of these patients.

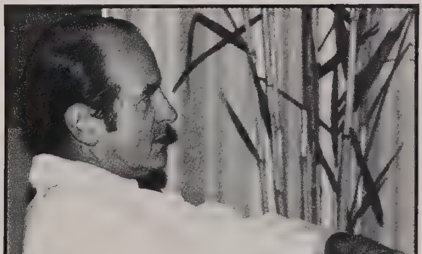
Pituitary tumor surgery has been developed with the cooperation of the Division of Neurosurgery. The transsphenoidal approach has primarily been developed here at Duke by Dr. Kenan. Duke has become one of the foremost centers for pituitary surgery.

A number of research projects have been developed utilizing the hyperbaric facilities here at Duke. Dr. Farmer has developed an international reputation as an authority on the effects of hyperbaria and diving on the auditory and vestibular system. Other studies currently in progress utilizing the chamber include the treatment of osteoradionecrosis and radiation chondritis. Again Dr. Farmer is the primary investigator in these studies.

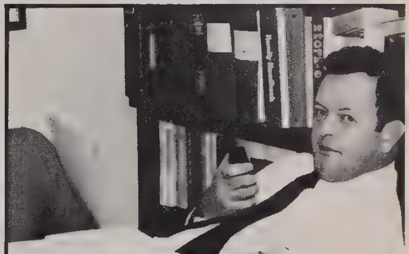
Radiology of the head and neck is available in the otolaryngology clinic under the supervision of Dr. Baylin. Equipment includes a stratomatic unit as well as a conventional head unit. Dr. Baylin is also actively engaged in our teaching program and the residents' research projects.

The Otolaryngology Laboratory, under the direction of Dr. Casseday, is primarily interested in the central mechanisms of audition. Dr. Casseday has a joint appointment in the Department of Psychology and also directs the research of doctoral students from the Department of Psychology.

T. Watanabe, M.D.



P.D. Kenan, M.D.



J.C. Farmer, Jr., M.D.

OTOLARYNGOLOGY FACULTY

Row 1 (L to R): P. Kenan, W. Hudson, G. Baylin. **Row 2:** J. Farmer, B. Cole.

Professor: William R. Hudson, M.D. (Bowman Gray, 1951), *Chief.*
Professor: George Baylin, M.D. (Duke, 1937).
Associate Professors: T. Boyce Cole, M.D. (U.N.C. at Chapel Hill, 1962); Joseph C. Farmer, Jr., M.D. (Duke, 1962); Patrick D. Kenan, M.D. (Duke, 1959).
Associate Medical Research Professor: John H. Casseday, Ph.D. (Indiana, 1970).
Associate Clinical Professor: Carl M. Patterson, M.D. (Maryland, 1944).
Assistant Medical Research Professor: Peter G. Kaufman, Ph.D. (Chicago, 1971).
Assistant Clinical Professors: Carter S. Bagley, M.D. (Virginia, 1959); James W. Brown, Jr., M.D. (Duke, 1941); Charles E. Clark, III, M.D. (Michigan, 1968); William B. Costenbader, III, M.D. (Virginia, 1964); Seth G. Hobart, Jr., M.D. (Virginia, 1950); Lynn A. Hughes, M.D. (Oklahoma, 1968); James B. Powell, II, M.D. (Alabama, 1965).
Clinical Associates: Edward V. Hudson, M.D. (Bowman Gray, 1962); William B. Inabnet, M.D. (Louisiana, 1958); Thaddeus H. Pope, Jr., M.D. (U.N.C. at Chapel Hill, 1957).

Instructors and Chief Residents: John W. Loudermilk, M.D. (Texas Tech., 1975); Tseuneo Watanabe, M.D. (Keio University, Japan, 1974).
Assistant Residents: B. Jean Adams, M.D. (Duke, 1976); Richard W. Albert, M.D. (Hahnemann Medical College, 1976); Douglas G. Finn, M.D. (New York Medical College, 1975); Samuel R. Fisher, M.D. (Duke, 1975); William J. Hall, M.D. (Louisville, 1977); William B. Klinke, M.D. (Texas Southwestern, 1974).

OTOLARYNGOLOGY RESIDENTS

Row 1 (L to R): J. Loudermilk, T. Watanabe, J. Adams. **Row 2:** R. Albert, D. Finn, W. Hall, S. Fisher.

PLASTIC, ORAL, AND MAXILLOFACIAL

Nicholas G. Georgiade, D.D.S., M.D.
Chief

The various specialties involved in the Division of Plastic, Maxillofacial and Oral Surgery became part of the Division at differing points in its history. The specialty of Plastic Surgery was initiated when the Duke University Medical Center was still young. Plastic Surgery was introduced by Dr. Randolph Jones in the early 1940's. Unfortunately he met an untimely death in 1944, and he was succeeded by Dr. Kenneth Pickrell, who came to Duke on the General Surgical Staff and gradually assumed the responsibility for Plastic Surgery. By 1948, Plastic Surgery was able to appoint its first resident, Dr. James Kelly.

The specialty of Oral Surgery was added in 1953 by Dr. Nicholas Georgiade who had training as an Oral Surgeon during World War II. Dr. Georgiade joined the senior staff in 1954 following residency training in General and Plastic Surgery. Because of the expanded capabilities of the staff, the Division assumed its present title to describe more accurately the various services available to patients.

The residency program of the Division, starting with one Plastic Surgery resident, expanded to the point where one Plastic Surgery resident and one Oral Surgery resident were training each year. Further growth is reflected in the current residency program where the Division now trains four Plastic Surgeons each year in a two year residency program. A six months research fellowship is also available to the residents in the Division's Research Laboratory. The training of Oral Surgeons has expanded to the point where the Division now trains three residents, one in each level of training in that specialty. The Division is also responsible for the Plastic Surgery and Oral Surgery residency program at the adjacent Durham V.A. Hospital.

A research laboratory, initiated by Dr. Georgiade and now also augmented by Dr. Serafin, is housed in the new Bell Research Building. Investigative work in burns, tissue culture, and skin and organ preservation was the main research thrust for many years and resulted in a large number of research publications. More recently, our senior staff and residents have been working on investigative procedures dealing with microvascular surgery and with the survival of skin flaps and their circulation.

During its history, the Division has sponsored many symposia and in addition, has served as host to meetings sponsored by the Plastic Surgery Research Council, the American Society of Maxillofacial Surgery, and the Educational Foundation of the American Society of Plastic and Reconstructive Surgery. Our faculty members have served as officers in these professional organizations and have served their profession as editors, editorial consultants, and visiting lecturers and consultants. They also have over three hundred scientific publications and have been editors and contributing editors to fifteen surgical textbooks.

The Division attracts a large number of cleft lip-palate cases, as well as patients with more severe congenital craniofacial anomalies. To deal with the problems presented by these patients, the use of multidisciplinary treatment teams was initiated.

Our cleft palate team has been functioning for more than thirty years, and our senior staff are well known for their clinical and research records. Disciplines represented on the cleft palate team include Orthodontics, Speech Pathology, Audiology, and Medical Psychology. With the introduction of newer surgical techniques, previously uncorrectable congenital craniofacial anomalies could be treated successfully. The Division established a craniofacial team which includes many surgical and medical specialties in addition to Plastic and Oral Surgery.

A Facial Rehabilitation Center is sponsored by the Division because of the necessity to view the facial complex from multidisplinary perspectives. The cleft palate team and the craniofacial team became a part of this Center. In addition, the treatment of acquired facial and craniofacial defects are considered by its staff members. Dr. Georgiade is the Director of this Center, and Dr. Edward Clifford is the Co-Director.

The Division has also become known for its work in breast surgery and for the use of microsurgical techniques in Plastic Surgery. The senior staff have pioneered techniques of treatment in premalignant disease of the breast and in breast reconstruction following mastectomy for carcinoma. As a result of these efforts a textbook, *Reconstructive Breast Surgery,* has been

N.G. Georgiade, D.D.S., M.D.

PLASTIC, ORAL, AND MAXILLOFACIAL FACULTY

(L to R): K. Pickrell, D. Serafin, N. Georgiade, R. Riefkohl.

published, and this year a second textbook has been published, *Breast Reconstruction Following Mastectomy,* both edited by Dr. Georgiade. A well-attended National Symposium on this subject has also been successfully conducted here at Duke.

The microsurgical techniques, developed at Duke, have been used in the free transfer of tissue from distant parts of the body. A course in microsurgical techniques, held in the Division's Research Laboratory, is offered four times a year. These offerings have attracted world-wide attention, as reflected in the composition of the physicians taking the course. One of our faculty members, Dr. Serafin, has published a very popular textbook on microsurgery this year.

The Division seeks to encourage a diversity of interests among its faculty, and this is reflected in the varied clinical practice. The range of patients treated by members of the senior staff is quite large. Approximately 3,300 operative procedures are performed annually by this Division at the present time. The Oral Surgical Service has expanded its services over the past year with the opening of a new expanded clinic; this expansion has doubled the clinical facilities available for patient care.

The Division now has a total of nine full-time professional staff, four Research Assistants and Associates, and one Physician's Associate.

DIVISION OF PLASTIC AND MAXILLOFACIAL SURGERY

Professor: Nicholas G. Georgiade, D.D.S., M.D. (Duke, 1949), *Chief.*

Professors: Edward Clifford, Ph.D. (Minnesota, 1954); Kenneth L. Pickrell, M.D. (Johns Hopkins, 1935); Galen W. Quinn, D.D.S. (Creighton, 1952), Orthodontics.

Associate Professors: Robert M. Mason, D.M.D. (Kentucky, 1977), M.S.O. (U.N.C. at Chapel Hill, 1979), Orthodontics; Donald Serafin, M.D. (Duke, 1964).

Assistant Professors: John C. Angelillo, D.D.S., M.D. (Duke, 1970); Ronald Riefkohl, M.D. (Tulane, 1972).

Assistant Clinical Professor: Verne C. Lanier, Jr., M.D. (Vanderbilt, 1966).

Research Associate: Ruth S. Georgiade, M.A. (Duke, 1950).

DIVISION OF ORAL SURGERY

Professor: Nicholas G. Georgiade, D.D.S., M.D. (Duke, 1949), *Chief.*

Assistant Professor: John C. Angelillo, D.D.S., M.D. (Duke, 1970).

DIVISION OF PLASTIC AND MAXILLOFACIAL SURGERY

Instructors and Chief Residents: William J. Barwick, M.D. (Tennessee, 1971); Richard O. Gregory, M.D. (Indiana, 1971).

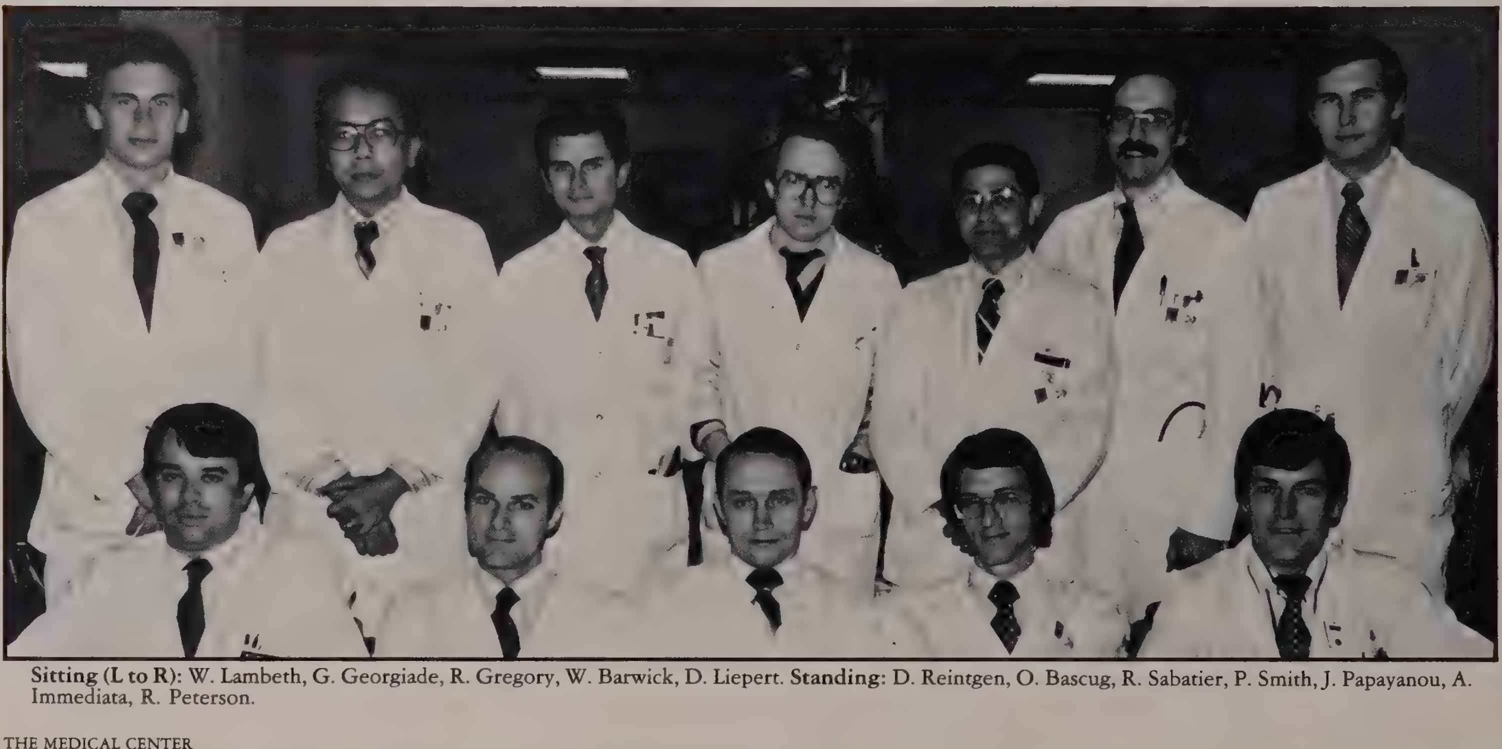
Assistant Residents: Oscar T. Bascug, M.D. (Santo Tomas, Manila in Philippines, 1967); Anthony J. DeFranzo, M.D. (George Washington, 1973); Gregory S. Georgiade, M.D. (Duke, 1973); William L. Lambeth, M.D. (U.N.C. at Chapel Hill, 1971); Richard E. Sabatier, M.D. (Tulane, 1973); Paul J. Smith, M.D. (New Castle University, 1968); Ivan Thomas, M.D. (PAH Lavi University, Iran, 1971).

DIVISION OF ORAL SURGERY

Instructor and Chief Resident: Dieter W. Leipert, M.D. (Columbia, 1976).

Assistant Residents: Anthony R. Immediata, M.D. (University of Pennsylvania, 1978); James Papayeanou, M.D. (Columbia, 1974).

PLASTIC, ORAL, AND MAXILLOFACIAL RESIDENTS



Sitting (L to R): W. Lambeth, G. Georgiade, R. Gregory, W. Barwick, D. Liepert. **Standing:** D. Reintgen, O. Bascug, R. Sabatier, P. Smith, J. Papayanou, A. Immediata, R. Peterson.

UROLOGY

James F. Glenn, M.D.
Chief

Nineteen-eighty marks the fiftieth anniversary of Duke University Medical Center and the urology program. The growth of urology at Duke can be traced in the expansion of the residency program, the proliferation of laboratory and investigative programs, and the expansion of clinical care and numbers of patients served.

Today, the combined private and public clinics register more than twenty thousand visits to urology annually. The inpatient census at Duke Hospital alone frequently exceeds seventy patients, and up to three thousand operations are performed each year.

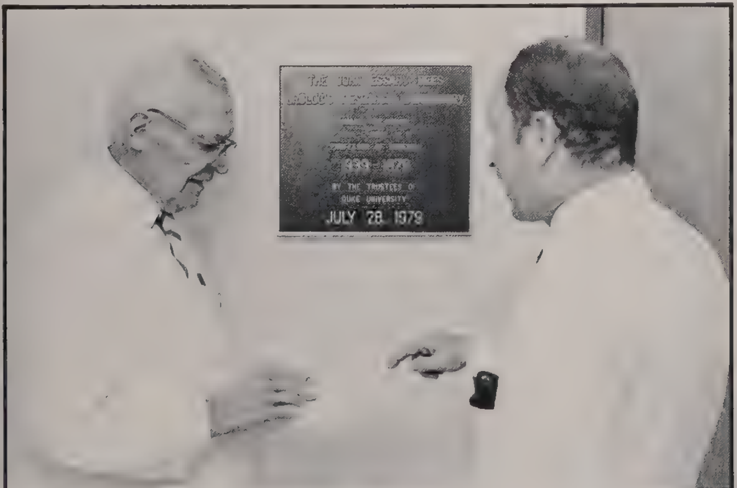
However, the statistics for Duke Hospital reflect only part of the story. The affiliated hospitals in the Duke Urology system include Durham County General Hospital, the Durham Veterans Administration Hospital, the Asheville Veterans Administration Hospital, Lenox Baker Crippled Children's Hospital, and the Cabarrus Memorial Hospital in Concord, N.C. All of these institutions have busy clinical services and are staffed by clinical faculty as well as residents rotating from the parent program. The urology patient census, for example, in the two Veterans Administration Hospitals indicates twenty-two patients in the Durham V.A. Hospital and twenty-five patients in the Asheville V.A. Hospital.

Beginning with one member of the faculty in Urology in 1930, the full-time staff at Duke has grown to eight in number. In addition, there are nine urologists who hold adjunct clinical professorial appointments, five in the Durham County General Hospital, three in Concord, and one at the Asheville V.A. Hospital. These supplemental faculty members constitute a critical part of the clinical training of the Duke Urology resident and are active participants in the teaching programs.

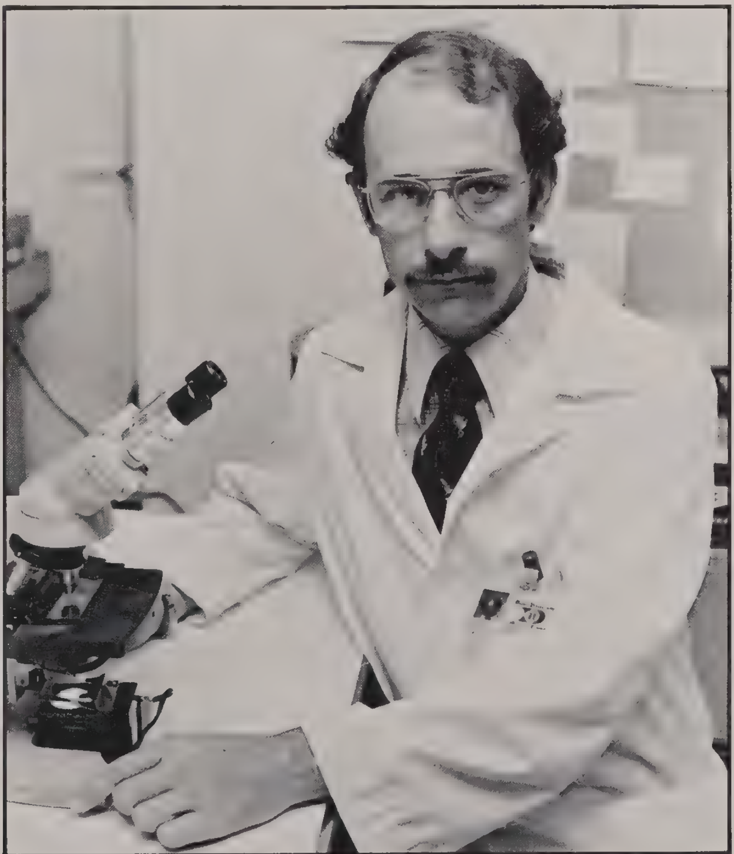
Similarly, research appointments are extremely important as a facet of the overall teaching effort, with the laboratory constituting an integral part of the resident training opportunity. Currently there are four Ph.D.'s engaged in basic and clinical research, primarily related to the Urologic-Oncology programs. In addition to the faculty, the roster of employees relating to the Division of Urology include the research staff, residents, and technical, secretarial and nursing personnel. Together, the Urology staff numbers approximately one hundred people, all of them important to the overall impact of patient care with related teaching and research.

The residency program in urology, first approved in the early 1930's for one trainee, is now a four year program with three residents appointed annually, a total of twelve in training. A minimum of two years of basic surgical resident training is required prior to appointment in urology. Many residents have had an additional year or more of training in surgery, medicine, pathology, pediatrics or laboratory research as fundamental experience prior to entering urologic residency. Investigative and clinical fellowships, one or two annually, are offered for individuals with an interest in basic research or academic urology. These appointments are renewable in certain instances, and some fellows have remained in such capacity for two or three years.

Over its fifty year history, the program has produced ninety-one residents, all but five still living and virtually all still practicing actively. The Duke residents are predominantly in the southeastern United States, but there are former residents in Illinois, Nebraska, Maryland, Washington, Wisconsin, Texas,



J.E. Dees, M.D., and J.F. Glenn, M.D.



C.C. Carson, III, M.D.

UROLOGY FACULTY

(L to R): R. Krueger, E. Anderson, C. Carson, III, J. Glenn, J. Weinerth, G. Webster, J. Dees, D. Paulson.

Utah, Pennsylvania, Ohio, Massachusetts, New York, and New Jersey. Trainees from overseas have included urologists in Mexico, Australia, Ireland, England, Venezuela, and Belgium. Thirty-nine of the Duke residents have held full-time or part-time academic appointments, and of this number, six have held permanent or interim chairmanship at one time or another, with eight of these holding full professorships in various medical schools at the present time.

S. Tannenbaum, M.D., C.C. Carson, III, M.D., and S. Kramer, M.D.

Professor: James F. Glenn, M.D. (Duke, 1953), *Chief.*

Professors: E. Everett Anderson, M.D. (Duke, 1958); James H. Semans, M.D. (John Hopkins, 1936).

Associate Professors: Robert A. Bonar, Ph.D. (California at Berkeley, 1953), Biophysics; David F. Paulson, M.D. (Duke, 1964); John L. Weinerth, M.D. (Harvard, 1967).

Associate Clinical Professors: Jack Hughes, M.D. (Pennsylvania, 1943); Louis C. Roberts, M.D. (Duke, 1934).

Assistant Professors: Culley C. Carson, III, M.D. (George Washington, 1971); Elaine K. Crovitz, Ph.D. (Duke, 1964); Robert A. Older, M.D. (Duke, 1968); George S. Webster, M.B., Ch.B. (Univ. Coll. of Rhodesia, 1968).

Assistant Medical Research Professors: John W. Day, Ph.D. (Iowa, 1972); Yousef Sharief, Ph.D. (North Carolina State, 1973); Karen S. Webb, Ph.D. (U.N.C. at Chapel Hill, 1973).

Assistant Clinical Professors: A. James Coppridge, M.D. (Virginia, 1953); Alvin D. Couch, M.D. (South Carolina, 1948); Joyce D. Coughlin, M.D. (Buffalo, 1944); Hector H. Henry, II, M.D. (Tulane, 1965); Edwin M. Tomlin, M.D. (Tennessee, 1946).

Associate: Robert W. Green, Ph.D. (Hawaii, 1969).

Clinical Associates: James A. Bergant, M.D. (Kansas, 1969); Alexander Maitland, III, M.D. (Yale, 1955); George H. Mickey, Ph.D. (Texas, 1938); Randall B. Vanderbeek, M.D. (Duke, 1963).

Clinical Instructors: Oscar W. Brazil, Jr., M.D. (Louisiana, 1961); Raymond E. Joyner, M.D. (Bowman Gray, 1968).

Clinical Research Associate: Dannie H. King, Ph.D. (N.C. State, 1973).

Instructors and Chief Residents: Sam D. Graham, Jr., M.D. (Virginia, 1974); Stephen A. Kramer, M.D. (Tulane, 1975); Earl W. Mabry, M.D. (Oklama, 1971); Matthew S. Smith, M.D. (Georgetown, 1975).

Assistant Residents: Wayne A. Cline, Jr., M.D. (Bowman Gray, 1976); G. Byron Hodge, M.D. (Duke, 1977); Henry C. Hudson, M.D. (Alabama, 1975); Richard Bruce Koefoot, Jr., M.D. (Nebraska, 1977); Gerald H. Lin, M.D. (National Taiwan University, 1973); W. Marston Linehan, M.D. (Oklahoma, 1974); Gordon L. Mathes, Jr., M.D. (Tennessee, 1976); Sigmund Tannenbaum, M.D. (Duke, 1975).

UROLOGY RESIDENTS

Row 1 (L to R): W. Cline, Jr., M. Schact, S. Tannenbaum, B. Koefoot, S. Kramer. **Row 2:** G. Mathes, S. Graham, Jr., R. Floyd, M. Smith.

HEALTH ADMINISTRATION

David G. Warren, J.D.
Acting Program Director

The Department of Health Administration conducts a five semester graduate course, leading to the Master of Health Administration (M.H.A.) degree, and sponsors various mid-career training programs in health administration.

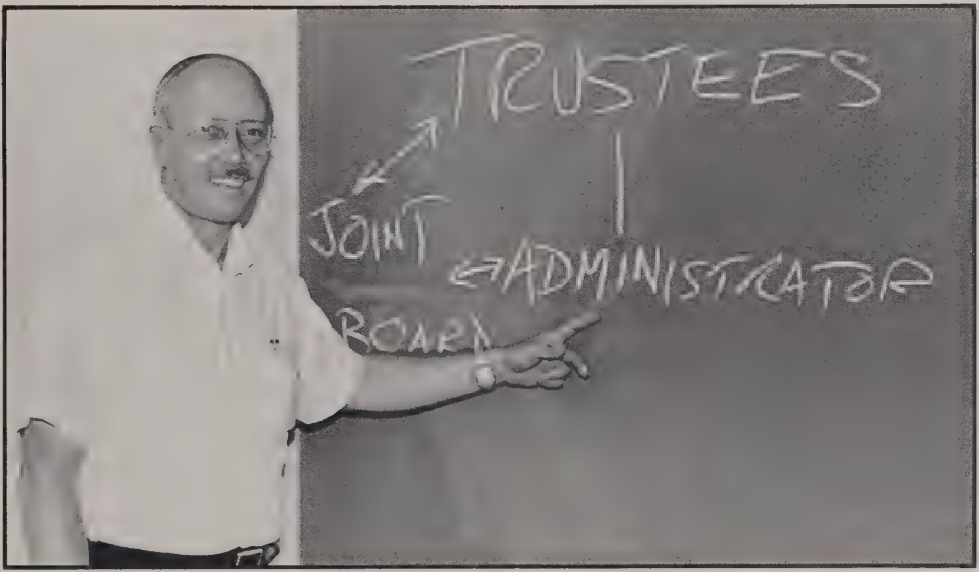
Up to forty students are accepted each year in the Master's program from a variety of undergraduate institutions, including a number with prior health-related experiences.

The first year of the program is taught in conjunction with the Graduate School of Business Administration, stressing management concepts, finance and quantitative decision making techniques. This business orientation is combined with courses relating to the health care system, epidemiology, planning, economics, legal considerations and policy. Students also gain practical experience in health care institutions during the program.

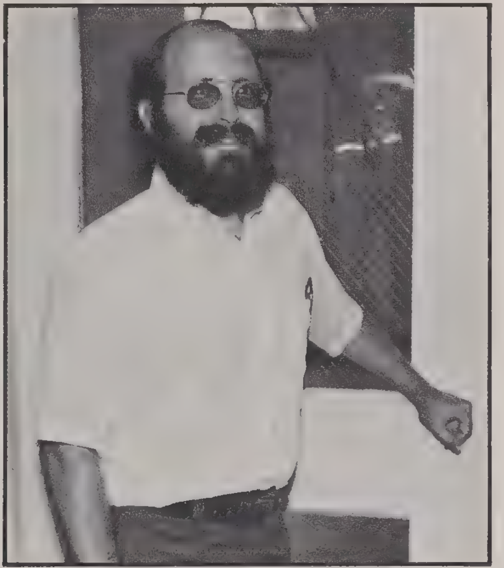
Soon after the establishment of the Duke University Hospital in the 1930's, the Duke program became one of the earliest in the country to train administrators. The program was traditionally well known for its hospital training program, but the current curriculum is directed much more broadly. Student graduates enter careers in ambulatory care, planning, consulting, insurance, and government. Alumni numbering nearly four hundred are in prominent, responsible positions throughout the health care field.

Health administration students work with medical students in such activities as the East End Health Center in East Durham. The administrative functions within the Center are performed by health administration students. Some students also do residencies in Duke Hospital and many hold part-time jobs in the Medical Center.

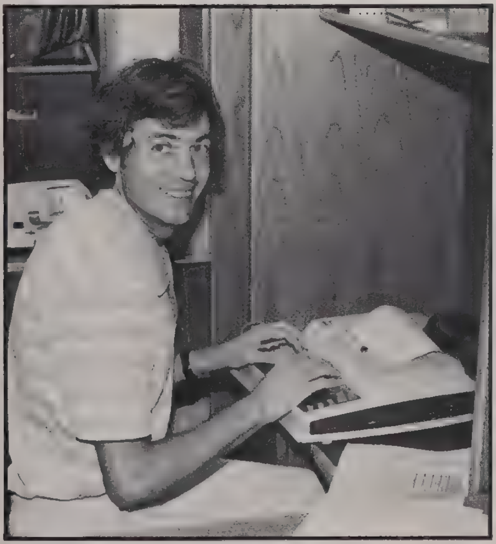
The Health Administration Program is located in Trent Drive Hall. The acting Program Director is David G. Warren, J.D.



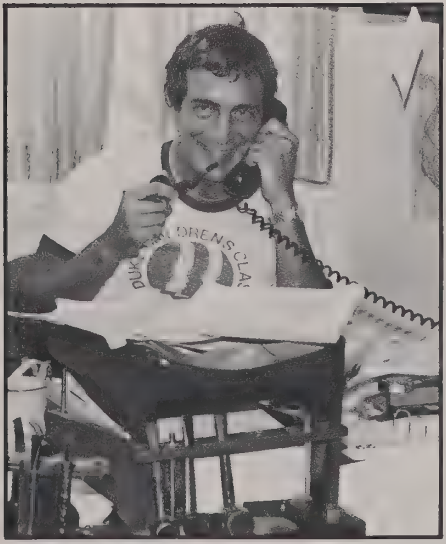
Don Smith



D. Henderson-James



M. Warner, Ph.D.



D. Falcone, Ph.D.

C. Goldsmith and B. Harris

HEALTH ADMINISTRATION FACULTY

Row 1 (L to R): D. Smith, L. Hartwig, D. Warner, D. Warren. **Row 2**: A. Kaluzny, J. Mauskopf, T. Delaney. **Row 3**: L. Swanson, B. Jaeger, R. Peck.

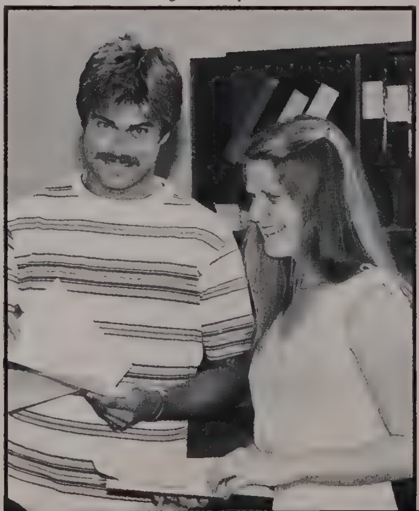
HEALTH ADMINISTRATION STUDENTS

Row 1 (L to R): S. Erixon, P. Worthy, S. Weinert, M. Eng, S. Edwards, L. Howard, J. Pietrucha, C. Wettlaufer. **Row 2**: J. Green, S. Denault, J. Bruno, C. Horton, D. Krueger, M. Frame, D. Sullivan, N. Foster, C. Savage. **Row 3**: J. Reilly, M. Gottenborg, B. Metcalf, K. Fyffe, S. Roberts, J. Roskelly, D. Larkin, M. Stralko, S. Lipstein. **Row 4**: D. Knox, A. Pollokoff, L. Lattal, G. Tsahakis, C. Conley, A. Jacknow, K. Urbon. **Row 5**: B. Goldberg, K. Smith, N. Vernegaard, R. Connor.

S. Scott and C. Winders

C. Eddins

J. Nulty and S. O'Connell



J. Galston

PHYSICAL THERAPY

Robert C. Bartlett
Chairman

The Department of Physical Therapy of Duke University Medical Center is composed of educational and patient care components, under the chairmanship of Professor Robert C. Bartlett. A total staff of ninety persons includes physical therapy clinicians, physical therapist assistants, students, faculty, and supportive personnel. The organizational structure and geographic arrangement of the Department offer an excellent environment for professional enrichment through an easy flow and exchange of ideas and skills among the faculty, staff and students. Staff members have many opportunities to contribute to the education of students through assistance in classroom instruction and regular supervision of students in clinical practice. Conversely, the faculty participate in direct patient care. The clinical service, through seven day coverage, provides over sixty thousand inpatient and outpatient treatments a year.

The Department's clinical component was established in 1930 with the educational component, a fifteen month certificate program, being established in 1943 under the leadership of Miss Helen Kaiser. Miss Kaiser directed the Department to national status until her retirement in 1969. In 1970, the educational program was redesigned and expanded to an entry level curriculum which leads to the degree of Master of Science from the Graduate School, Duke University. Graduates of the program during its thirty-seven history are serving the health delivery system throughout the nation.

The expansion of the Medical Center, with the opening of Duke North Division, will enable the Physical Therapy Department to experience new growth in the areas of "limited care" and "long-term rehabilitation." The establishment of these programs will complete the Department's ability to provide a wide range of comprehensive patient care. In addition to the provision of services within the Medical Center, members of the Department participate in community and state wide activities such as the Fayetteville Area Health Education Center, Coordinating Council for Senior Citizens in Durham, The Headstart Program of Operation Breakthrough, The Durham Public Schools and the Roxboro Public Schools.

Barbara Minard, L.P.T.A.

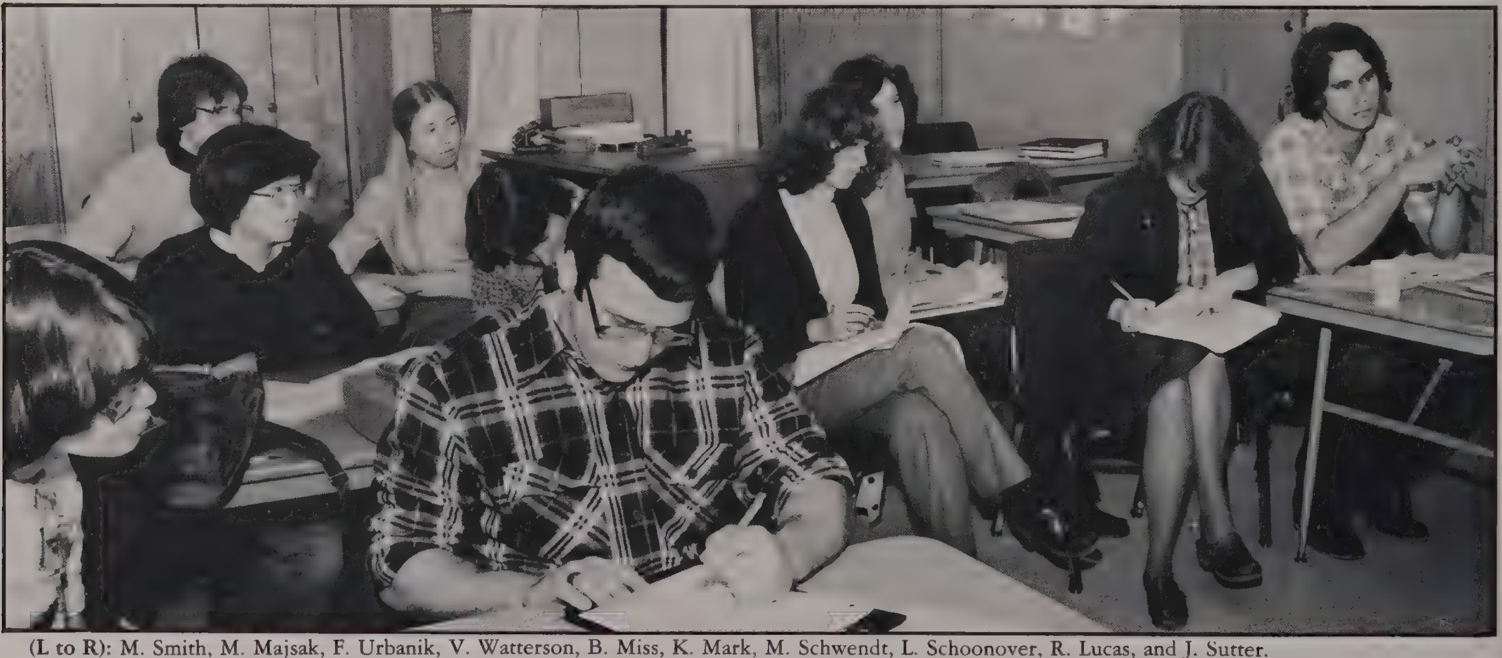
Karen Harmount, L.P.T.

PHYSICAL THERAPY FACULTY

Row 1 (L to R): E. Eckel, S. Nelson, E. Branch. **Row 2:** E. Villanluva, R. Bartlett, P. Duncan, C. Smith. **Not Pictured:** M. Riordan, G. Horton.

PHYSICAL THERAPY STUDENTS

Row 1 (L to R): F. Urbanik, R. Lucas, V. Watterson, C. Casper, P. Chilcote, M. Petty. **Row 2:** E. Kane, J. Malarz, D. Herbek, G. Benci, R. Daasch, L. Schoonover. **Row 3:** Majsak, C. Busby, M. Smith, F. Gold, S. Jablon, M. Knaup, T. Jackson, B. Miss, S. Hardy. **Not Pictured:** M. Schwendt, J. Sutter, K. Mark.



(L to R): M. Smith, M. Majsak, F. Urbanik, V. Watterson, B. Miss, K. Mark, M. Schwendt, L. Schoonover, R. Lucas, and J. Sutter.

ALLIED HEALTH EDUCATION

NURSE ANESTHETIST PROGRAM

Row 1 (L to R): R. Platt, S. Arnold, P. Johnson. **Row 2:** J. Meyer, S. Berkeley, K. Stanley. **Row 3:** M. Clifton, R. Dudzik, J. Schreiner, J. Carlson. **Row 4:** G. Meyers, D. Jump, D. Gleason, C. Campbell.

CYTOTECHNOLOGY PROGRAM

Row 1 (L to R): P. Ashton, CT(ASCP); W. Johnston, M.D.; S. Moore, CT(ASCP); R. Wallace, CT(ASCP). **Row 2:** J. Uhorchak, S. Hayes, N. Weisner, M. Duncan.

ELECTROPHYSIOLOGY TECHNOLOGY PROGRAM

Row 1 (L to R): A. Means, M. Sherron, S. Cheung, D. Brown. **Row 2:** C. Lee, M. Beane, D. Blair.

HEALTH ADMINISTRATORS MANAGEMENT IMPROVEMENT PROGRAM

Row 1 (L to R): D. Warren, Acting Program Director, Dept. of Health Administration; J. Slaughter; D. Stecker; B. Newton; D. Taylor; B. Brooks; S. Cowhig; N. Roach; T. Delaney, Program Director, H.A.M.I.P. **Row 2:** J. Steinert, Associate Director, Charlotte Memorial Hospital; F. Eckel, Professor of Pharmacy, U.N.C. at Chapel Hill; R. Hoover; B. Hendrix; G. Braun; B. Cale; J. Snellings; G. Wright; W. Belmonte. **Row 3:** L. Donahue; R. Salyers; C. Raber; S. Priddy; D. Crouch. **Not Pictured:** W. Bundy; J. Dobbins, Jr.

MEDICAL TECHNOLOGY PROGRAM

Row 1(L to R): S. Calzada, J. Shoffner, S. Houchins, M. Kelly, P. O'Donnell, C. Mackey, L. Pike. **Row 2:** S. Casper, B. Rathbun, B. Willoughby, B. Lavietes, L. Hsu, K. Beam, D. Drake. **Row 3:** C. Wells, M. Schmidt, L. Lunn, I. Long, K. Koop, L. Longmire.

P. Bartlow, CT (ASCP)

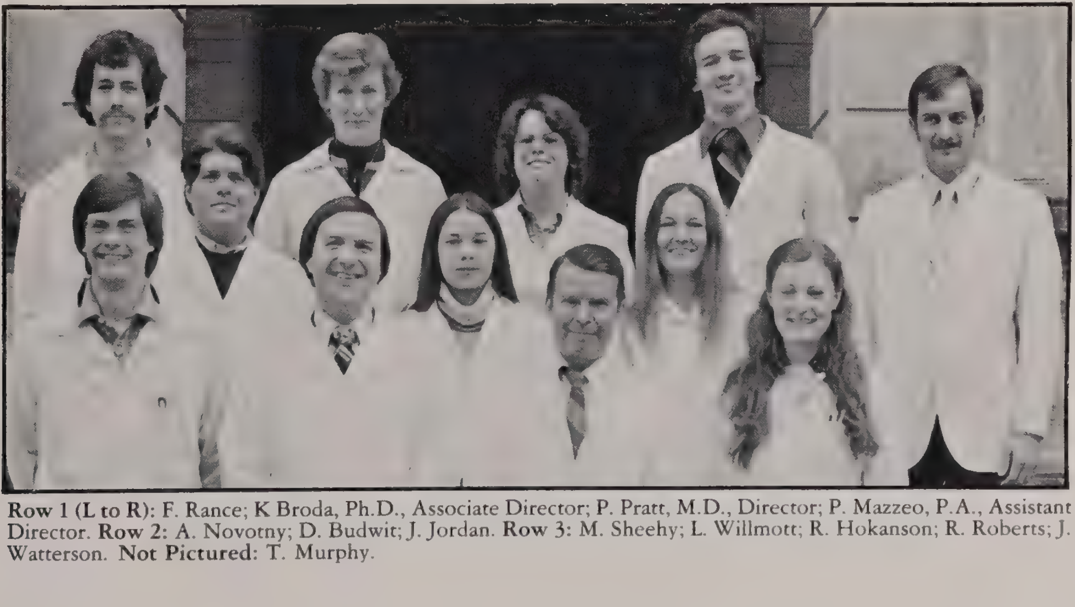
NUCLEAR MEDICINE TECHNOLOGY PROGRAM

Row 1 (L to R): C. Carter, T. TenCate, C. Conner, C. Alexander. **Row 2:** B. Blackburn, Educational Director; K. Toth, L. Poovey, J. Workman, M.D., Medical Director; M. Suraci, D. Henry, L. Reed.

PASTORAL CARE AND COUNSELING PROGRAM

Row 1 (L to R): R. Faison; P. Keese; D. Franzen; V. Tyson. **Row 2:** D. Dealtry; J. Guffy; W. Aitken, Director, Chaplains Service; S. Wood. **Row 3:** B. Foland; J. VanVickle; M. McMahon; R. Goodman. **Row 4:** B. Bushong; L. Jones; S. Miracle; J. Detwiler, Director, Clinical Pastoral Education.

PATHOLOGIST'S ASSISTANT PROGRAM



Row 1 (L to R): F. Rance; K Broda, Ph.D., Associate Director; P. Pratt, M.D., Director; P. Mazzeo, P.A., Assistant Director. **Row 2:** A. Novotny; D. Budwit; J. Jordan. **Row 3:** M. Sheehy; L. Willmott; R. Hokanson; R. Roberts; J. Watterson. **Not Pictured:** T. Murphy.

PHYSICIAN'S ASSOCIATE PROGRAM

Year 1

Row 1 (L to R): A. Palmer, C. Kirschenbaum, H. Hausmann, K. Zachmann, D. Weissman, C. Grant, J. Fullerton, M. Ettari. **Row 2:** L. Decker, E. Kidd, D. Mattingly, J. Scott, S. Withers, D. Osborne, D. Hammerstrom, M. Oxentenko, K. Davenport. **Row 3:** T. Fuller, B. Armstrong, W. Jennings, A. Fidao, K. Greco, G. Glaubke, W. Schultz, K. Scadden. **Row 4:** J. Lord, J. Cohen, J. Stajich, E. Fieg, J. Trowbridge, M. Poole, L. Crocker, J. Strand.

Year 2

Row 1 (L to R): C. Bacal, S. Miller, T. Cureton, M. Hayden, K. Fifield. **Row 2:** A. Sheffield, C. Coles, K. Batts, E. Sullivan, E. Alfonsi, C. Weaver. **Row 3:** J. Hollinshead, C. Hohl, M. Isbell, L. Locklear, R. Conerly.

D. Nelken, P.A.

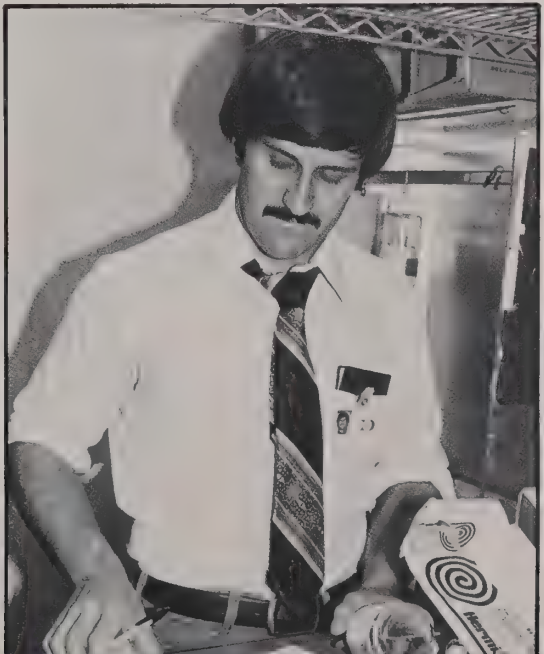
HOSPITAL AND CLINICAL PHARMACY RESIDENCY PROGRAM

Row 1 (L to R): V. Verling, J. Norquest, S. Guthrie. **Row 2:** R. Rodgers, N. Rodaway, M. Skolaut, Program Director.

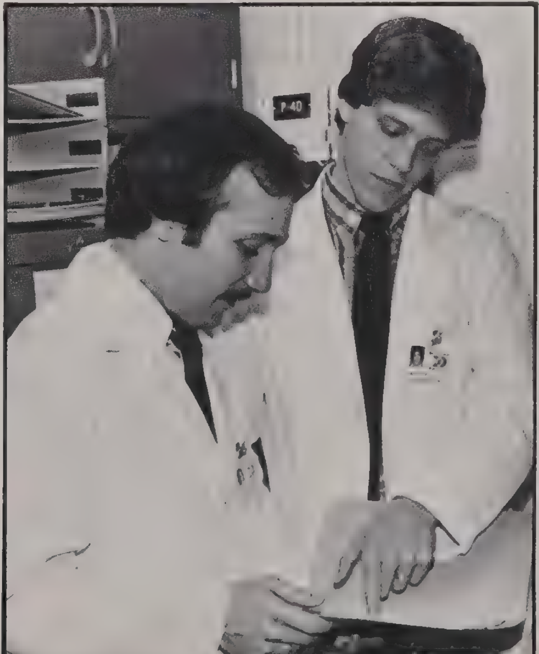
CLINICAL PSYCHOLOGY INTERNSHIP PROGRAM

L to R: J. Mowrey, L. Barnett, L. Paulauskas, S. McKay, L. Anderson, A. Scovern, P. Chafetz.

D. Oakley, R.Ph.



S. Salon and A. Scovern, Ph.D.



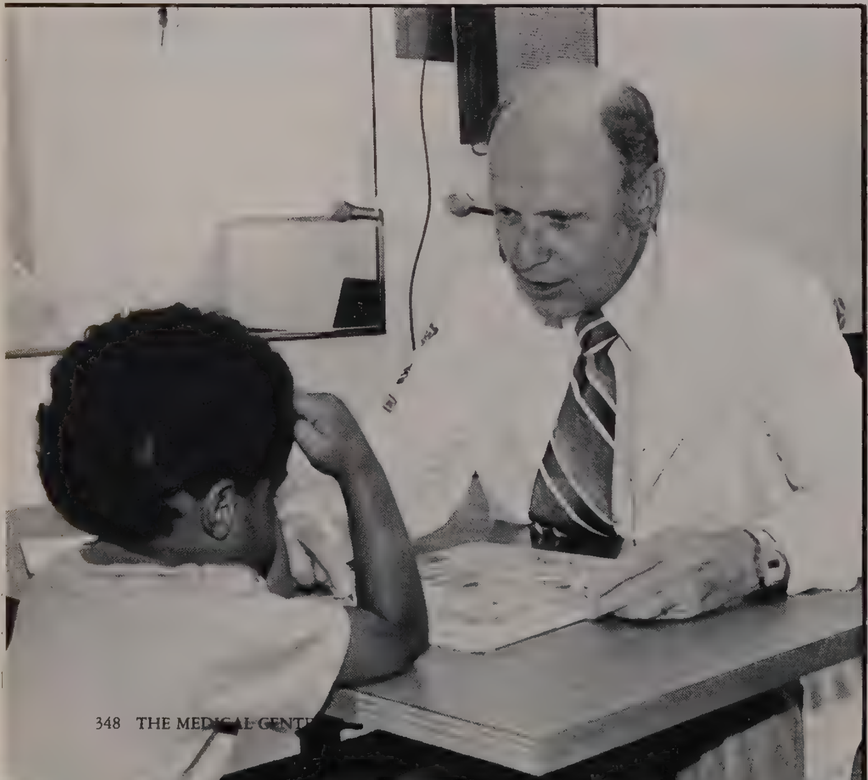
RADIOLOGIC TECHNOLOGY PROGRAM

Row 1 (L to R): A. Cates, K. Holmes, A. Burris, S. Medrick, G. Roberts, H. Best. **Row 2**: T. Neal, T. Oakley, S. Davis, B. Duberstein, K. Hoyle, D. Rogers. **Row 3**: C. Phaneuf, Instructor; M. Butler, T. Knight, B. Collins, D. Kirks, M.D., Medical Director. **Row 4**: C. Easterling, Technical Director; D. Bunn, S. Allen, M. Sawyer, D. Hilton, M. Stone, Instructor. **Not Pictured**: D. Fletcher, L. Brach, S. Bunney.

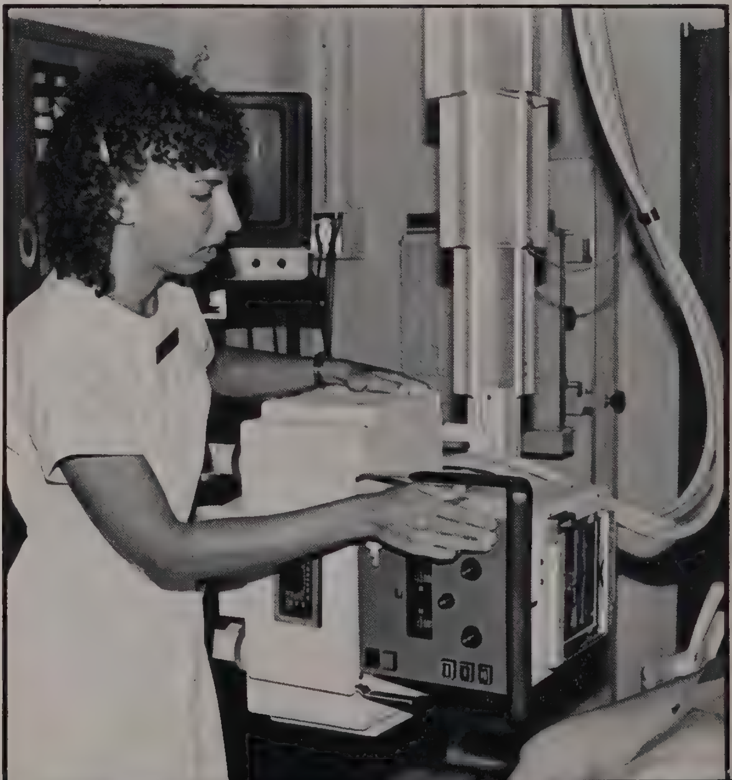
SPEECH PATHOLOGY-AUDIOLOGY RESIDENCY PROGRAM

Row 1 (L to R): G. Fletcher, K. Fedor, L. Kunze, J. Horner, C. Paone. **Row 2**: N. Schafer, B. Weber, S. Fowler, J. Spalding, M. Foley, J. Riski.

L. Kunze, Ph.D., Director Speech Pathology-Audiology Program



K. Adkins, R.T.



MEDICAL CENTER LIBRARY/ COMMUNICATIONS CENTER

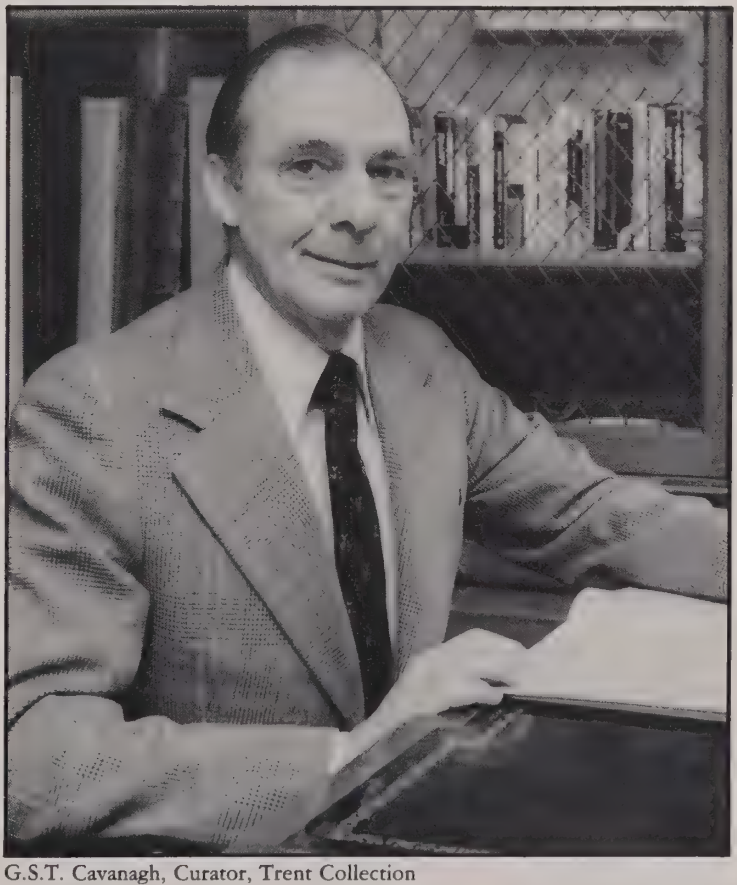
Warren Bird
Director

Dr. Wilburt C. Davison records that the provision of a library was one of his first concerns from the time of his appointment as Dean of the Duke University School of Medicine in 1927. Books and journals, he said, "are more important than buildings, faculty, and students, and more difficult to find." For the purpose he obtained a special grant of $100,000 from the Duke Endowment and sought the advice of colleagues in other institutions. Miss Judith Farrar, as Hospital Librarian, and he began assembling a collection of journals using three dollars per bound volume as a general rule. The total cost of the original Hospital Library collection, according to Davison, was $124,000, a figure for less than what the Library now spends in a year to keep its collection up-to-date. For that sum Duke acquired very rapidly a fairly comprehensive collection of standard journals including complete runs of the classic journals.

Development over the next thirty years was much more restricted. By 1960 a major medical center had developed, but the Library had not grown proportionately. The staff was tiny, and in 1961 only 700 current periodicals were being received when a generally accepted standard for medical center libraries was 1,200 to 1,500. By 1963 the staff had been enlarged to provide standard reference and bibliographical services, coverage of the current literature had been greatly increased, and readers had begun to respond. The better and bigger the Library became, the more hopelessly inadequate the old quarters were. Proposals for a new library building had been made by the Library Committee as early as 1959, and serious studies of needs and solutions were made at the instigation of Dean Barnes Woodhall. Dr. Woodhall and Vice-President William G. Anlyan were successively members and chairmen of the Board of Regents of the National Library of Medicine and so were keenly aware of potential developments in biomedical communications. In 1970 when Dr. Anlyan commissioned the architects to design a building for the Library, he presented them with a new concept of the Library as the core of a communications center, and construction began in 1973.

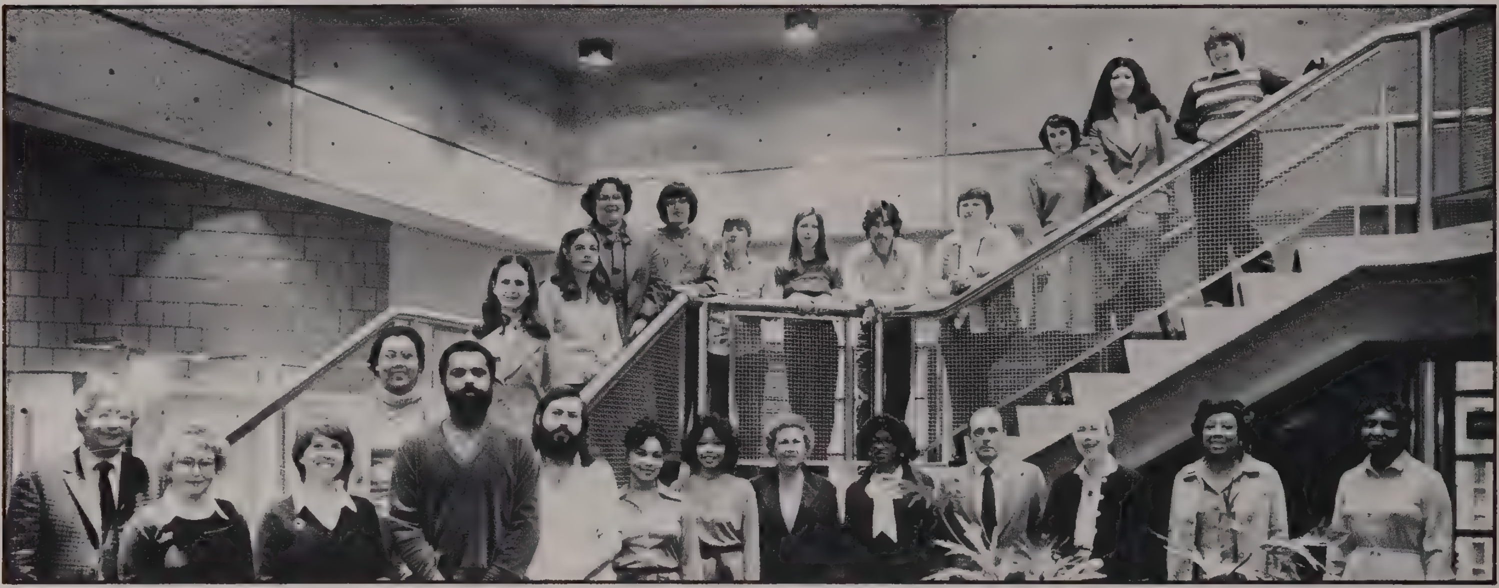
In these new quarters in the Seeley G. Mudd Building, the Medical Center Library now has space adequate for staff, collections and readers. Modern medical education and research, like other academic disciplines, are being affected by recent advances of the electronic age and made use of computer searching of comprehensive biomedical literature data banks, non-book formats for audiovisual education, and data processing techniques for internal record maintenance and production. The Library has also hosted some pilot experiments in computer-assisted instruction. Together with several hundred other biomedical libraries, the Library participates in networking links to assure broad coverage of the literature and is an active resource center for the mid-Atlantic area.

A deep understanding of the informational needs of the users of a library — within the Medical Center and the region — is the base upon which the dynamic development of its collections depends. It is also necessary to make provisions for the future and to appreciate the multidimensional character of the various disciplines that are to be supported. For example, the study of the history of medicine has become seriously involved in the ethics and sociology of medicine. Health care delivery techniques encompass such diverse fields as economics, demography and politics, as well as the tenets of the Practice of Medicine. The scientific bases of medicine find expression in essentially all the physical, natural, mathematical and behavioral sciences. The Library must continue to maintain an awareness of the breadth of these activities in medicine and to match resources with needs. Such is the goal of the Staff of the Medical Center Library; the objective has always been, and will continue to be, to provide the right information to the right person at the right time.

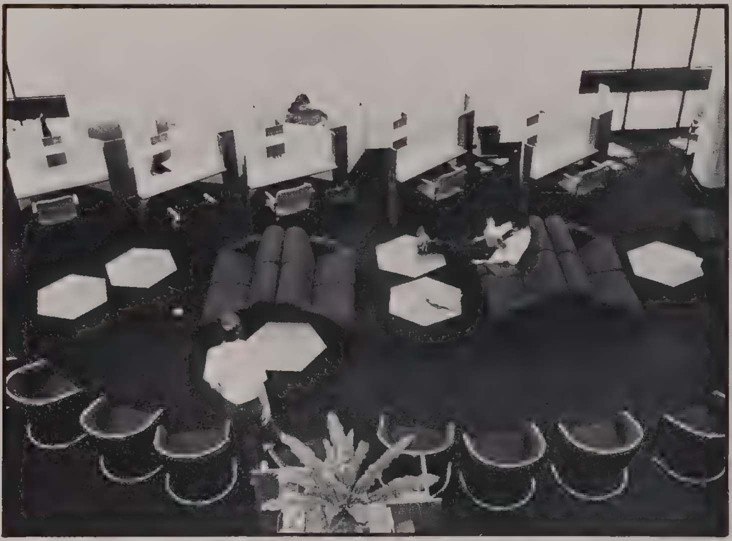


G.S.T. Cavanagh, Curator, Trent Collection

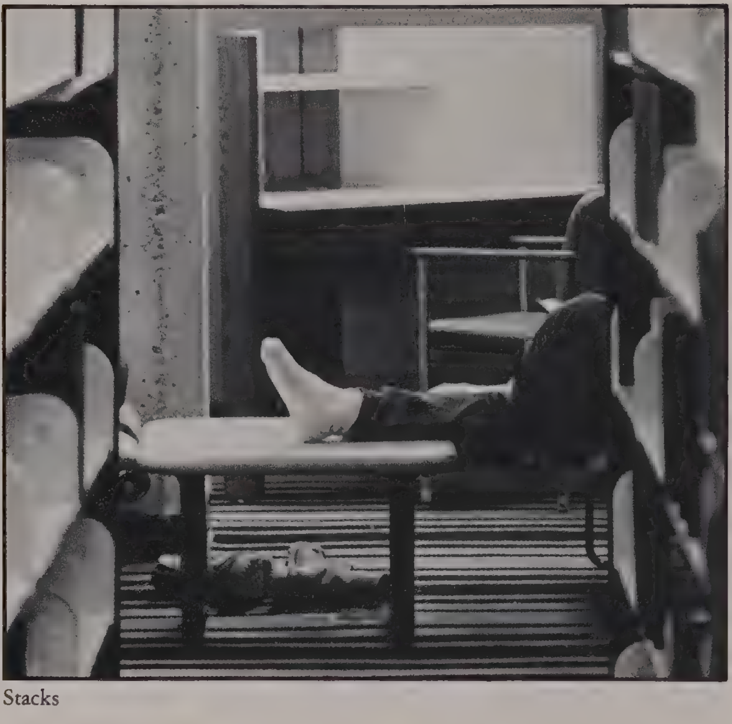
MEDICAL CENTER LIBRARY STAFF



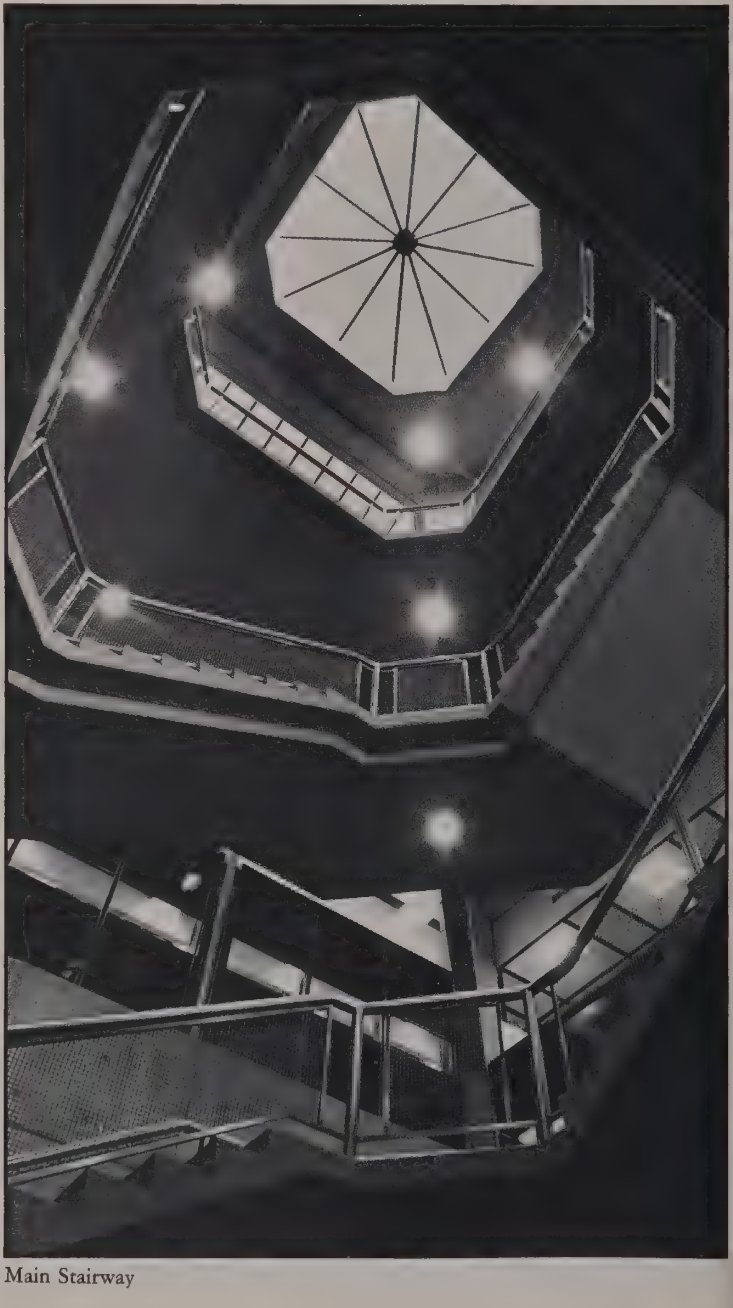
Row 1 (L to R): W. Bird, M. Birch, K. Kruse, G. Stephens, III, D. Donlon, S. Stapleton, H. Vines, T. Wiethe, P. Rains, G. Cavanagh, S. Smith, C. Tatum, E. Cooper. **Row 2:** J. Walker, B. Busse, K. Porter, E. Adams, V. Reeves, G. Bowers, P. Ecklund, S. Johnson, M. Brown, M. Walke, S. Feinglos, J. Woodburn.



Current Journal Room



Stacks



Main Stairway

SCHOOL OF NURSING

Ruby L. Wilson, Ed.D.
Dean

Acting on the conviction that excellent hospital care was essential to a high quality of life for citizens of the Carolinas, James B. Duke in 1925 bequeathed ten million dollars for the erection of a hospital and schools of medicine and nursing that were the foundation of what is now the Duke University Medical Center. The School of Nursing was planned in conjunction with the Hospital, and in May, 1929, Miss Bessie Baker became its first Dean. Although recruited from the University of Minnesota, Miss Baker shared with most members of the originating medical faculty a background of experience at the Johns Hopkins University Medical Center, and she fit her ideas easily into the planning for hospital operations led by Dr. Wilbert C. Davison, Dean of the School of Medicine and the first chairman of the clinical departments.

As early as 1929, Davison stressed that the Duke nursing student would be like both the university student and the medical intern, with classroom and laboratory instruction complementing practical experience in the care of patients. Most members of the first nursing class, which matriculated in January, 1931, were from North Carolina. The standard curriculum led to a Diploma of Graduate Nurse or, upon completion of sixty additional hours of acceptable college work, to a Bachelor of Science in Nursing degree. By the time the first class graduated in 1933, the reputation of the new school was beginning to draw applicants from many states; of these women, an increasing percentage presented one or more years of college work upon application and opted for the B.S.N. degree.

During these first years the art and skills of bedside nursing were taught by Miss Loise Grant, assistant to Miss Baker. The remainder of the curriculum was either taught or coordinated by Miss Ann Henshaw Gardiner. Members of the medical faculty frequently took responsibility for single lectures or lecture sets, but Miss Gardiner was the person who integrated the material from class to class and provided continuity from session to session. For the first decade at Duke she was the influential faculty member in setting academic standards, but nursing supervisors and head nurses assisted in the specialized clinical instruction. The nursing students lived in Baker House, which was initially constructed as a separate building but later joined to the Hospital; graduate nurses also lived there.

In December of 1934 the first constitution and by-laws were drawn for the Duke University School of Nursing Alumni Association, which has been active ever since in maintaining close relationships between over 2,500 graduates and the School. In 1935 students organized a Green Journal Club through which to keep abreast of new developments in the emerging nursing profession. The increasingly professional self-image of the nurse was leading, by the end of the decade, to a redefinition of nursing education that emphasized technical and professional competence more than training through primarily bedside apprenticeship. National nursing organizations also began to demand that collegiate schools of nursing be organized under the control of university rather than hospital structures. In November, 1940, Duke abolished the B.S.N. option and became a hospital of nursing. Of the graduates of the first decade, two of every five earned the B.S.N. degree; one of every two practiced in the South.

World War II dictated that the second era in the history of the Duke University School of Nursing be dominated by expansion and accelerated training rather than by accreditation criteria. In April of 1941 the U.S. Public Health Service suggested that Duke increase its enrollment in order to help provide the nurses necessary for both military and civilian service. Under the leadership of Miss Margaret I. Pinkerton, who succeeded Miss Baker in 1939, Duke increased the size of its 1941 class by forty-five per cent and thereafter admitted large classes every nine months (rather than every twelve) until 1948. Many of the graduates, particularly those who were members of the U.S. Cadet Nurse Corps, went directly into military service, leaving even more care of Duke Hospital patients in the hands of nursing students. Because of a shortage of space in the nurses' home (Baker House), a number of students roomed on the University's East Campus. Additional dormitory space for nursing students was provided by a federal matching grant in 1943, and a new facility was built on Erwin Road.

V. Baker

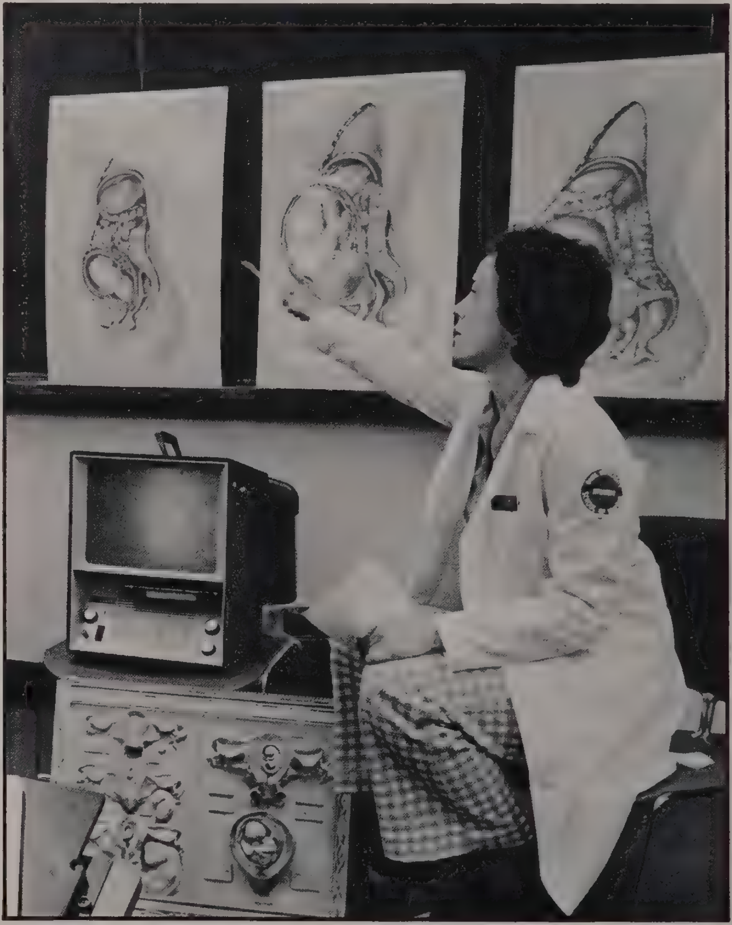
NURSING SCHOOL FACULTY

Row 1 (L to R): S. Seyler, R. Bradham, L. Scallion, S. Strong, J. Fox, S. Wallsten, D. Brundage. **Row 2:** N. Sayner, M. Williams, G. Daniel, C. Mihordin, N. Alexander, E. White, T. Horton, G. Waddell, M. Bye, Dean R. Wilson, M. Matteson.

After the war the curriculum of the School was revised under the leadership of a new Dean, Miss Florence K. Wilson. Within the University a Division of Nursing Education was created as an integral part of the Department of Education; this was under the direction of Dr. Helen Nahm, who later became a national leader in nursing education. Plans were drawn to enable students to earn a Bachelor of Science in Nursing Education degree as well as a diploma in nursing. The goal of this program was to prepare Duke graduates for teaching and supervisory positions. However, only a small number of students undertook the six or more years of academic work necessary to earn both diploma and degree. This program was but one of a host of new post-war educational activities. New in-service training programs were offered in the care of premature infants for public health nurses, in medical, surgical, and psychiatric nursing for graduate nurses, and in cost analysis for nursing administrators. A practical nursing course for black women was co-sponsored with the Durham City Schools and the North Carolina Department of Vocational Education. At the end of the 1940's the School was rated in the top quarter of nursing schools nationwide and attracted outstanding students from across the country. The decade was capped by approval for a new 350-bed nurses' home by the North Carolina Medical Care Commission. In 1950 a federal grant of $440,000 under the Hill-Burton Act was more than matched by a gift from Mrs. Elizabeth P. Hanes, wife of the former chairman of Duke's Department of Medicine. Since there was an acute shortage of nurses at this time at Duke Hospital and nationwide, the opening of Hanes House in June, 1952, was both a monument to the School's achievements and a symbol of the continuing need for its graduates.

In 1953 under the leadership of Dean Florence Wilson, the three-year diploma program was revised and a new four-year Bachelor of Science in Nursing program, which offered in public health nursing, became available. In 1955, when these programs and a revised plan of organization for the School of Nursing within the University won the approval of the National League for Nursing, Duke once again became a collegiate school. The continuing nursing shortage also sparked implementation of "team nursing," led by Miss Lelia Clark, Director of Nursing Services and Professor of Nursing, in which one general duty nurse supervised a team of graduate nurses and practical nurses in the care of particular groups of patients.

The tenure of Miss Ann Jacobanksy, who became Dean of the School in 1955, was marked by the discontinuation of the diploma program, the refinement of the Bachelor of Science in Nursing program, and the initiation of a Master of Science in Nursing program. Aided by a grant from the Rockefeller Foundation, Miss Thelma Ingles pioneered an innovative master's program devoted exclusively to advanced preparation in patient care rather than to preparation for teaching or administration. The National League of Nursing, however, was not ready to give approval for advanced preparation in clinical areas, but within a few years it became clear that Duke had again taken a leadership role in nursing as master's programs in advanced clinical nursing were given NLN accreditation. A later focus in geontological nursing was developed by Dr. Virginia Stone. In 1961-62, Hanes Project saw primary nursing instituted with separate payment for nursing services provided at three levels. Change in other traditional policies relative to patient care were also made as a result of this innovative program of the School of Nursing under the direction of Miss Ruby Wilson.



Class in childbirth instruction

NURSING SCHOOL STUDENTS
CLASS OF 1980

Row 1 (L to R): M. Yen E. Adams, V. Walker, L. Siconolfi, M. Fultz, P. Sotir, R. MacDonald, J. Crothers, C. Webber, E. Philpot, A. Slezak, M. Noonan, C. Scheil. **Row 2:** C. Klove, J. Kistler, S. Amos, J. Steely, M. Murphy, T. Shimer, M. Albert, C. Fischer, C. Emerich, B. Zagor, J. Weideli, L. Cheves, L. Barfield, N. Rolfe, C. Neuberger. **Row 3:** C. Mueller, V. Lamprecht, M. Silcox, S. Maddern, N. Melling, A. Hawes, A. Catlett, P. Lapworth, C. Epple, L. Griggs, P. Hering, R. Kokatnur, S. Meghdadpour. **Row 4:** N. Pernice, S. Lang, J. Wilkins, K. Quesenberry, C. Polzin, B. Hess, P. McNitzsky, A. Morledge, M. DeLorenzo, C. Weinberg, N. Goodnow, M. Dodds, K. Ogren, E. Wohlleben. **Row 5:** C. Gore, S. Shapiro, E. Dyer, E. Rice, B. Brondes, D. Gharst, P. Parker, N. Outzs, M. Ballenger, B. Pryzwara. **Row 6:** L. Eisenhardt, N. Baker, P. Slaughter, L. Schwersky, A. Heath, M. Redpath, E. Nicodemus, E. Niehoff, D. Kelley, E. Murray, K. Morgan.

In the late 1950's, Miss Dorothy Smith, previously a faculty member at Duke, developed at the new University of Florida Medical Center a nursing organization that included responsibility for both patient care and student education. This "unified model" had been disbanded earlier nationally in nursing in order to document that nursing students in collegiate programs were no longer "apprentice labor" in hospitals, but its reappearance was heralded as "innovative". This organization model again made its appearance at Duke with Dr. Myrtle Irene Brown, who served for just over two years as Dean and Director of Patient Services. Her appointment in 1967 continued a major revision of the bacculaureate nursing curriculum initiated by Dean Jacobansky. Flexibility and individuality of learning highlighted this curriculum, which had final implementation and refinement under the leadership of Dr. Ruby L. Wilson, who was appointed Dean in 1971 and continues to serve.

The decade of the 1970's has been earmarked by the movement of students, both undergraduate and graduate, to sites remote from the hospital for clinical experiences that have emphasized a health promotion orientation in additional to recovery from illness. A select number of undergraduates and faculty spend one semester in either Asheville, North Carolina, or England as part of the regular porgram, and others commute regularly to urban and rural community agencies. Independent study and nursing electives set the Duke programs apart from most other nursing programs, and the rapidly expanding resources of the Medical Center, in addition to those of the University, offer unusual learning experiences of high quality. A new nursing building for education and administration was completed in 1973, and additional classroom space was made available with the move of the Nursing Library to the new Medical Center Library in 1975. Research, writing for publication, and paper presentations at national professional meetings by faculty have significantly increased, and consortial planning for regional doctoral programs in nursing is underway.

The Fiftieth Anniversary year allows for reflection with pride upon the achievements and challenges of the School of Nursing from 1930-31 through 1980-81. The next fifty years are expected to unfold a continuing sequence of events that will ensure quality of service to patients through progressive developments in nursing research and education.

Lee Ann Cheves and parents on graduation day

V. Erickson

ACTIVITIES AND ORGANIZATIONS

Life as a Medical Student is often quite difficult, but amidst the long hours with the books and on the wards we vary our days with fellowship among classmates and in the Durham community. There are a vast array of organizations and activities in which we participate.

This section includes pictorial and written accounts of the many organizations and a few of the activities we have enjoyed: our student government, the Davison Council; special interest groups AMSA, SNMA, AMWA; service organizations East End Health Center and Sex Education; honorary societies Alpha Omega Alpha and Engle Society; publications *First Contact, Shifting Dullness* and *Aesculapian/80;* sports and entertainment including IM Sports, Student Faculty Tennis Tournament, Student-Faculty Show, the pig roast and PARTIES. Graduation and the Hippocratic Oath ceremonies, while closing out both this section and our medical school careers, are but the beginning of our lives as physicians.

I would like to thank those who helped me to prepare this section. Thanks to my many staff members, especially Jan Porter, Marsha Adams, and Pam Sholar for their long hours at the typewriter and layout sheets. Lord knows how long it would have taken me if I had done the typing.

J.F.L.

9

ACTIVITIES AND ORGANIZATIONS

AESCULAPIAN / 80 357
Davison Society 360
Alpha Omega Alpha 362
American Medical Student Association 364
American Medical Women's Association 365
Student National Medical Association 366
Sex Ed 367
Engle Society 368
First Contact 370
Shifting Dullness 371
Intramural Sports 372
Student-Faculty Show 374
Pig Roast and Parties 376
Student-Faculty Tennis Tournament 380
East End Health Center 382
Graduation 384

Section Editor
John Lucas

De wonderdokter Fop.

Ik ben de wonderdokter Fop,
De wereld door bekend.
In heel de wereld leeft er geen
Zoo'n hooggeleerde vent.

Zoo was er eens een kind heel ziek;
En weet gij, wat ik deed?
Ik brak 't den nek, waardoor het schaap
Geen smart of pijn meer leed.

De kok van Zijne Majesteit
Had erge pijn in 't hoofd;
Met éénen bijlslag heb ik hem
Van alle pijn beroofd.

Een man die bang voor pookken was,
Woû zijn gevaccineerd;
Ik entte hem met 't braadspit in,
En heb hem erg bezeerd.

In d'oorlog nam 'k een kapitein
Drie kogels uit de borst;
De man ging dood, en 'k had vergeef
Mij met zijn bloed bemorst.

Een rijk heer had een kropgezwel
(Dat was een naar gezicht!)
Ik haalde met een touw 't gezwel
En ook de keel hem dicht.

Een man, die kiespijn had, schoot ik
Zijn kies ferm uit den mond;
De man had nooit wêêr kiespijn, en
Was nooit wêêr ongezond.

Maar 't grootste meesterstuk deed ik
't Welk braaf wat opzien gaf,
Ik zaakde een heer, die 't pootje had.
Fiksch bei zijn beenen af.

Alzoo genees ik. — Over mij
Klaagt nimmer één patiënt;
Ben ik, de wonderdokter Fop,
Dan geen geleerde vent?

AESCULAPIAN / 80

John Lucas

Marsha Adams

In these three pages are the faces of those who are responsible for the remaining 513 pages of this 50th Anniversary Edition of the *Aesculapian.* Without their diligent work and sacrifice, often at the expense of their medical studies, this book would never have been possible. Unfortunately we are unable to include the many unpictured and unnamed students, staff and friends whose contributions as typists, salespersons, photographers, lay-out assistants, and writers were invaluable. We all hope that your enjoyment and satisfaction in reading this book equals our pride in producing the *AESCULAPIAN/80.*

Ann Lansing

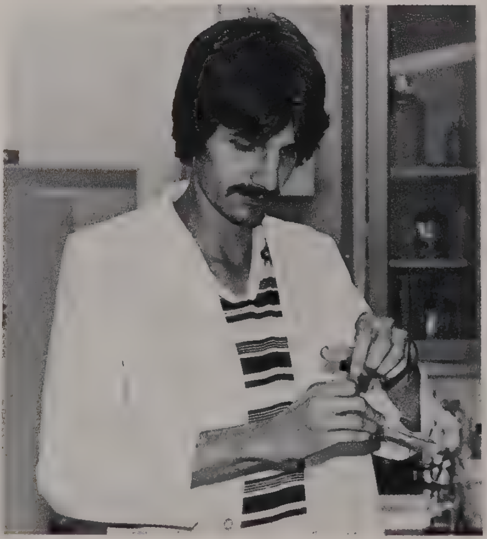
Pam Sholar and Jan Porter

Janet Kinney, Barbara Hodge, Mike Rocco, Jackie Rutledge

Febe Brazeal

Gina Michael

Renata Albrecht


Jim Walsh

Jeff and Suzanne Davis

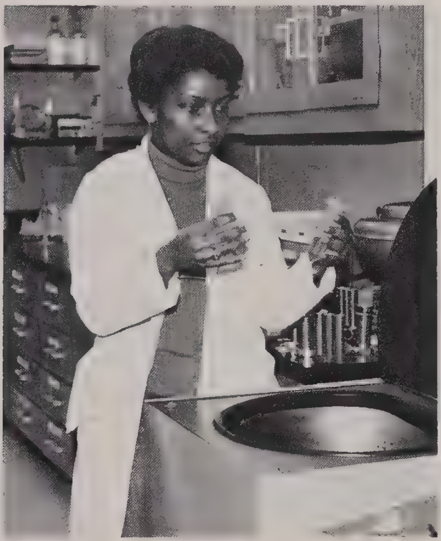
Linda Glaubitz

Meg Richardson

Faith Birmingham

Kemp Kernstine

Val Lightner


Candis Grace

Berrylin Ferguson

Frank Spence

Cafeteria Crew

Laurie Dunn

Jim Segars

Tom Collier

Pam Reynolds

DAVISON SOCIETY

The Davison Society is the student body of Duke Medical School. Each year it elects officers who comprise the Davison Council. The Council is concerned with serving the student body, the Medical Center, the University, and the community in a variety of ways.

First, the Council appoints or elects representatives to many Medical Center and University committees which desire the participation of medical students. These committees include the Medical School Advisory Committee, the Medical Education Policy Advisory Committee, the Medical School Admissions Committee, faculty search committees, and many others. In this way, medical students are able to provide these bodies with a unique perspective and also to educate their own colleagues regarding the making of administrative decisions.

Secondly, the Davison Society sponsors many organizations with educational, cultural, and philanthropic goals. These include, among others, the various intramural teams, the East End Health Clinic, the Sex Education Committee, the American Medical Women's Association, the American Medical Student's Association, the Student National Medical Association, and various seminar groups. The weekly publication, *Shifting Dullness,* informs students of the activities of these organizations and serves as general "bulletin board" function as well.

Finally, the Council organizes or supports various schoolwide social events. These include not only the usual array of parties, but also a series of Friday afternoon informal receptions co-sponsored by the clinical and basic science departments (dubbed "Renewal of System"), and the annual Student-Faculty Show each spring.

DAVISON COUNCIL MEMBERS 1979-1980

L to R, First Row: Eddie Miller, Hugh Morris, Bob Ziegler, John Alexander, Steve Ryan; **Second Row:** Jim Halverson, Julie Price, Gwen Arens, Isabelle Wilken's, Pam Bowe, Jim Morris; **Third Row:** John Lucas, Mike Rocco, Alan Crimm, Pam Sholar, John Buckner, Gary Kay, Bill Hazel; **Fourth Row:** Julie Lane, Threasa Reiman, Estrada Bernard, Alan Shelton.

DAVISON COUNCIL 1980-1981

OFFICERS

President	Alan Shelton
Service V.P.	Ed Miller
Social V.P.	Greg George
Treasurer	Gloria Ashland
Secretary	Philip Buescher
Sports Manager	Mark Ling

CLASS OF 1981

President John Lucas
Quay Snyder
Pam Sholar
Pam Bowe
Bob Parkerson

CLASS OF 1982

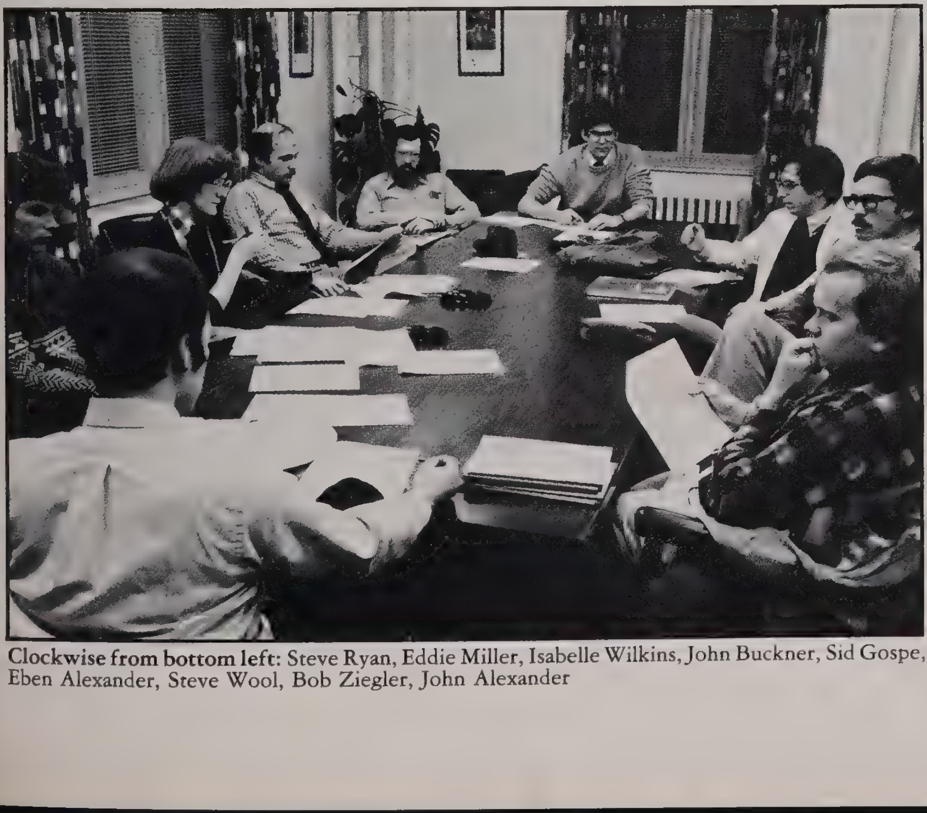
President Jim Halverson
Sam Dove
Jeff Warren
Diana Bures
Rosanne Pollack

CLASS OF 1983

President Julia Lane
Estrada Bernard
Ned Hooper
Tom Collier
Ken Roberts

COMBINED DEGREE CLASS

President Mark Ling
Marsha Adams
John Buse



Clockwise from bottom left: Steve Ryan, Eddie Miller, Isabelle Wilkins, John Buckner, Sid Gospe, Eben Alexander, Steve Wool, Bob Ziegler, John Alexander

COMMITTEE APPOINTMENTS ADMISSIONS

Roosevelt Gilliam III MSIII
Dan Caffrey MSIII
Lea Sewell MSIV

DEAN'S HOUR

Betsy Clardy MSIII
John Dein MSIV

HUMAN EXPERIMENTATION

David Albert MSIV
Jan Kylstra MSII (alternate)

CURRICULUM COMMITTEES FIRST

Dan Siedler MSIV
Sue Frederick MSII

SECOND

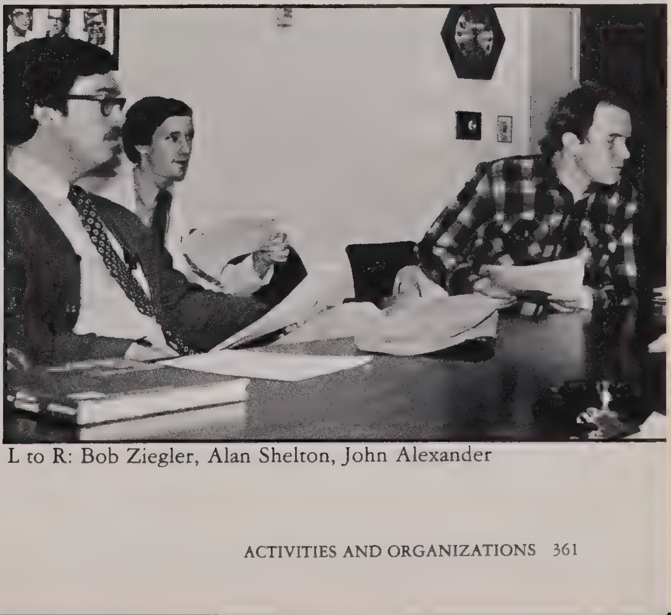
Anne McKnight MSIV
Kemp Kernstine MSIII
Bill Hazel MSII
Georgette Dent MSIII

THIRD

David Trader MSIV
Sandy Emery MSIII
Debbie Kondis MSIII
Marty Gagliano MSIII

FOURTH

Candis Grace MSIV
Beth Murdaugh MSIV
Ed Miller MSIV
Joanne Piscitelli MSIV



L to R: Bob Ziegler, Alan Shelton, John Alexander

ALPHA OMEGA ALPHA

Duke has had a chapter of Alpha Omega Alpha, the national honor medical society, since the medical school's beginning in 1931. Each year new members are elected in the fall with very few guidelines set by the national organization. That is, the total number of new undergraduate members cannot exceed one-sixth of the total number expected to graduate in that class and not more than one-half of the quota can be elected in their third year. In addition, up to three Duke Medical Alumni who have graduated at least ten years prior to election and one present faculty member may be elected. Prior to the advent of pass / fail grading, election was solely on the basis of scholastic rank. New members are now chosen by present members based on scholastic achievement, integrity, compassion and leadership potential.

At Duke, AOA is not merely an honor society, but actively seeks to contribute to medical education in several ways. Each year Duke applies for and has always been granted money from the national organization to sponsor a visiting professor. Individuals are invited who are of an interest to a broad spectrum of the medical community and the professors usually end up particpating in several departments' grand rounds as well as leading a discussion and/or seminar on a general topic pertinent to the medical profession. Notable guests in the past have been Dr. Arthur Dyck of Harvard, Dr. Theodore Cooper, Masters and Johnson and most recently Dr. Robert G. Petersdorf, former Chief of Medicine at the University of Washington. His week was highlighted by Medical and Surgical Grand Rounds and a Symposium on Comparative Health Care Systems.

Another annual activity sponsored by Duke's AOA is the student taught physical diagnosis course offered on an optional basis to first year students. This course taught by second and third year students not limited to members offers an opportunity for students to review and practice aspects of the physical in a relaxed and informal atmosphere. It does not interfere with regularly scheduled courses and has been met with much enthusiasm in the past on both the part of the teachers and first year class.

In the spring of each year, AOA gives students involved in research a chance to share with fellow students and faculty what they have accomplished. This is via a research symposium where students voluntarily present their research and first and second year students have an opportunity to view what is available to them for their third year of study. Each year a keynote speaker and judge is invited and we look forward to this year's guest, Dr. Francis Moore, Elliot Carr Cutler Professor of Surgery at Harvard.

Mary F. Earley
Vice President

1980 AOA MEMBERS

L to R, First Row: D. Attarian, D. Allen, W. Putnam, M. Earley, L. Abbey, M. Neuss, E. Coffey, J. Lucas; **Second Row:** R. Washburn, L. Froome, E. Alexander, N. Fitch, P. DeLuca, T. Gore, G. Ashland, F. Brazeal, J. Bird, J. Rutledge, S. Adler; **Third Row:** P. Foster, R. Stein, D. Siedler, D. Harlan, M. Gillman, D. Browning, M. Dresser, L. Markert, V. Lightner, T. White, R. Damiano, R. Ziegler, R. King.

CURRENT AOA MEMBERS

CLASS OF '80

Linda Abbey
Eben Alexander
Dave Attarian
Janice Bird
Alan Chu
C. Edward Coffey
Ralph Damiano
Mary Earley
Nancy Fitch
Paul Foster
Lynn Froome
Tom Gore
Richard King
Michael Neuss
Janet Russell
Stephen Ryan
Robert Van Dalen
Ronald Washburn
Thomas White

1980 OFFICERS

President	Paul Foster
Vice President	Mary Earley
Treasurer	David Howell

COMBINED DEGREE

Stuart Adler
Kim Boekelheide
David Browning
Michael Dresser
David Howell
Val Lightner
Louise Markert
Jackie Rutledge
Peter Sims
Robert Ziegler

CLASS OF '81

Dave Allen
Gloria Ashland
Febe Brazeal
Peter Deluca
Matthew Gillman
David Harlan
John Lucas
William Putnam
Daniel Siedler
Roy Stein

SPONSORS

Wendell F. Rosse, M.D.
Madison S. Spach, M.D.

1962 AOA MEMBERS

L to R, First Row: Tom Foster, Dick Kramer, Dr. Orgain, Bill Warden, Dick Stone; **Second Row:** Joe Farmer, Dave Sime, Dan Jones, Bill Baxley; **Third Row:** John Kapp, John Porter, ?, Tom Graham

AMERICAN MEDICAL STUDENT ASSOCIATION

L to R, First Row: Pam Sholar, Pam Bowe, David Albert, Jackie Rutledge; **Second Row:** Alan Crimm, Harry Severance, and Bob Parkerson.

The American Medical Student Association (AMSA) has historically been very active at Duke. Nationally AMSA developed from the Student American Medical Association (SAMA) during the late 1960's and now represents a totally independent medical student organization with broad interests and remarkable activism. This year commemorates the thirtieth birthday of the organization which has grown to over 25,000 members. Many Duke students have become involved with AMSA on a national level over the years, and the result has been beneficial to Duke as well as AMSA. Leadership skills are developed through national involvement, and this through the years has been a strong aspect of the organization at Duke. AMSA/SAMA at Duke initiated the development of the Davison Society in 1968, which has become the primary forum where all students are members and have a chance to be involved. AMSA began the sex education course (taught to seventh grade students) over ten years ago, and it has developed into a self sufficient program. It has also provided book cooperatives, events for faculty-student interactions, and seminar series for the benefit of all students. Many Duke students have also utilized MECO (Medical Education Community Orientation) and CTAP (Community Technical Assistance Program) for meaningful summer experiences. With the development of the Davison Society and the growth of other student organizations at Duke, the local activity of AMSA has diminished. National involvement remains a major focus of activity, and many Duke students have been involved. One of our students was National Vice-President and then National AMSA President, exemplifying the depth of Duke's involvement nationally. The future for AMSA at Duke is one of reorganization and one of defining the local role anew. More active recruitment of members is planned, and more local activities will be instituted. The multitude of benefits from national involvement will of course always be reaped, and it is hoped that these experiences will be utilized to foster the resurgence of AMSA locally.

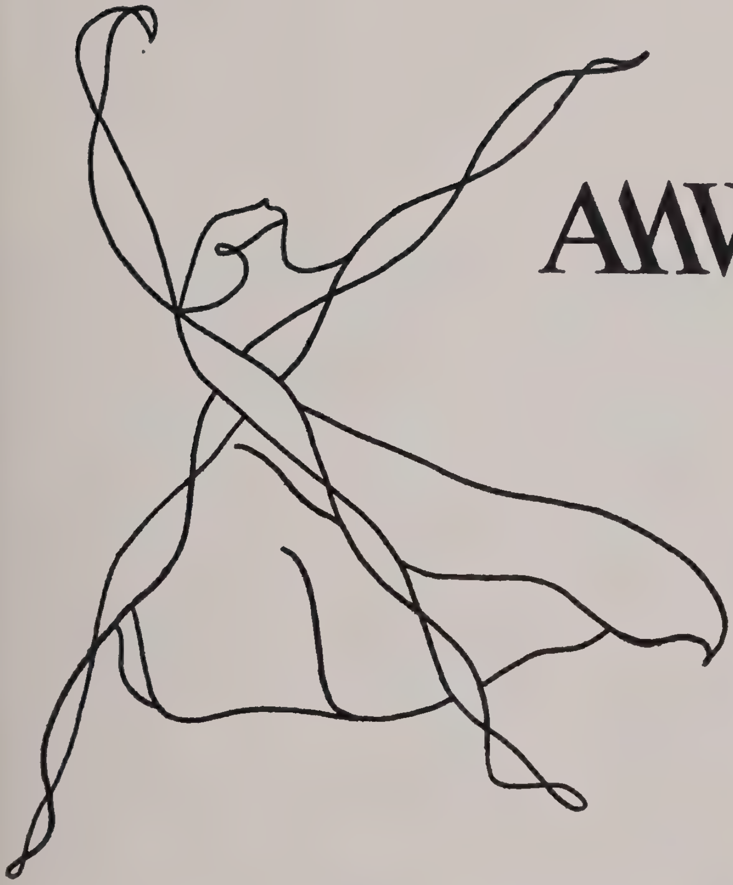
Alan Shelton
AMSA President '80

HEALTH IS WHOLENESS UNFOLDING
AND IT IS PRESENT
ONLY WHEN WE CONTINUE TO SEEK
IN OURSELVES, IN OUR INSTITUTIONS
TOGETHER WITH OTHERS,
A SHARING WHICH IS SIGNIFICANT.
~Nancy Milio

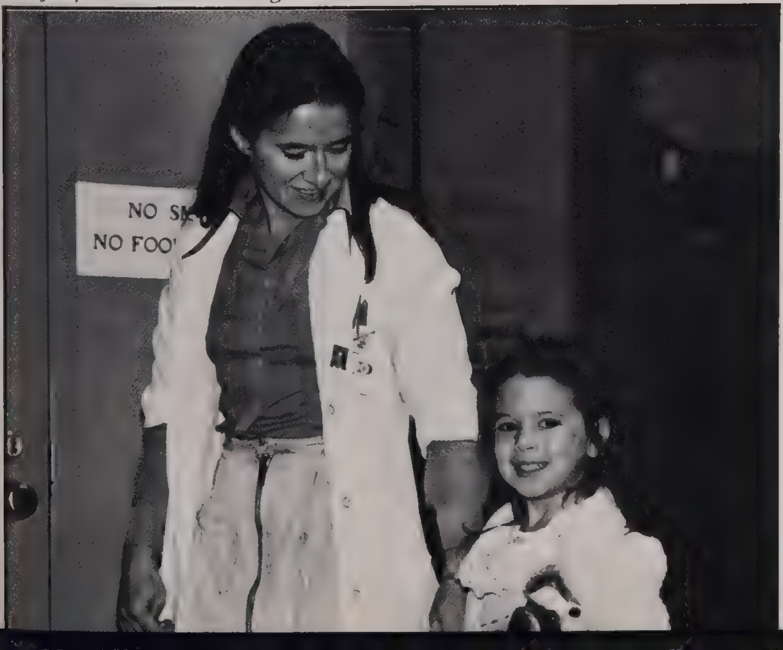
Jan Bird

AMWA American Medical Women's Association Inc.

~ A GROUP CREATED TO ENCOURAGE MUTUAL SUPPORT AND TO EXPLORE ISSUES OF CONCERN TO WOMEN IN MEDICINE.



Norma Lemon

Dr. Judy Andersen with daughter


STUDENT NATIONAL MEDICAL ASSOCIATION

The Student National Medical Association (SNMA) is a national nonprofit organization of over 3000 third world students in 120 chapters in medical schools and undergraduate institutions across the U.S. Founded in 1964 mainly through the efforts of students from Howard and Meharey Medical Colleges, it has as its purpose:

- to create an atmosphere where professional excellence and moral principles can find fullest expression
- to disseminate information relative to minority problems within the field of medical education
- to develop workable programs for the implementation of better urban and rural health care
- to provide national leadership in the promulgation of legislative policies for the provision of better health care
- to sponsor programs for minority youth to encourage their entrance into the health professions
- to raise the level of minority student recruitment, admissions and retention in health care professional schools
- to take necessary and proper steps to eradicate prejudicial practices in medical education and related areas

The Duke Chapter of SNMA, comprised of 27 black students, is very active both locally and nationally in the implementation of these goals. Funded partly through the Davison Council and by its own efforts, they coordinate a wide variety of activities. Some of their activities include active recruitment of qualified minority students in North Carolina and other states, visits to area high schools to encourage students to enter health care professions, continuous communication with the admissions committee regarding the progress of minority admissions, a Radio Health-Awareness Series, various publications including the issue of *First Contact* entitled "Blacks in Medicine," and participation in a number of community health projects. The Duke SNMA has also sponsored several prominent speakers to address the Medical Center community, among them Dr. Thomas Malone, Deputy Director of the National Institutes of Health, Dr. Robert Davison, President of the National Medical Association, and Dr. Dorothy Brown, surgeon and former member of the U.S. House of Representatives for the state of Tennessee.

Representatives of the Duke University Chapter annually attend the SNMA National and Regional Conferences as well as the NMA Regional Conference to stay abreast of activities outside the Durham Community. In addition, the Duke Chapter of SNMA served as co-sponsor of the 1980 Regional NMA-SNMA Conference and Medical Education Workshop.

Norma Lemon in center

Asela Russell

Sam Dove

SEX ED

Over the last three years the Sex Ed Committee has been growing continuously. Having Dr. John Steege and Debra Kaplan as faculty advisors has been important, but the dedication of students is the key. Each year our sex educators include about forty students from the School of Medicine, eight from the School of Nursing and four from the Physician's Associate Program. Altogether this involves over 1,300 hours of volunteer service.

One program, headed by Barb Clark for the last two years, has been the organization of a course on "Issues in Human Sexuality" for up to 130 Trinity College folk. Med students serve as discussion group leaders following each of the thirteen evening lectures. Our experiences here not only help us get closer in tune with our own sexuality, but also allow us to develop skills of leading group discussions. The positive feedback from undergrads reassures us that we are helping in their development.

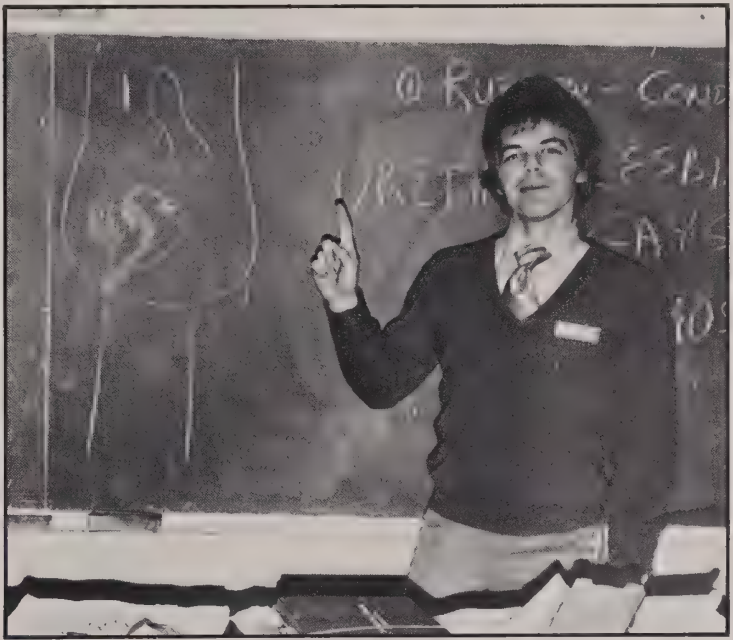
The other major program, headed by Eddie Miller for the last three years, has been teaching an eight day course on "Human Sexuality and Adolescence" for all 750 seventh graders in the Durham city school system. This has been a fun and eye-opening experience for all involved and, of course, the kids just love us. There is nothing a seventh grader would rather learn about than sex and the psycho-social problems of adolescence. By emphasizing the importance of responsible, adult-like communication and decision making we feel we are a healthy influence on their development.

Over the years we have acquired an extensive library of books, articles, pamphlets, films and other teaching aids. This year we are receiving two journals on sex education and counseling and are sending a representative to the national meeting of the National Association of Sex Educators, Counselors and Therapists.

As far as we know, Duke involves more med students in sex education than any other school in the world. That is something to be proud of!

Eddie Miller

Dr. John Steege, Debra Kaplan


Eddie Miller

Students in Sex Ed class

Asela Russell, Dan Mason

THE ENGEL SOCIETY

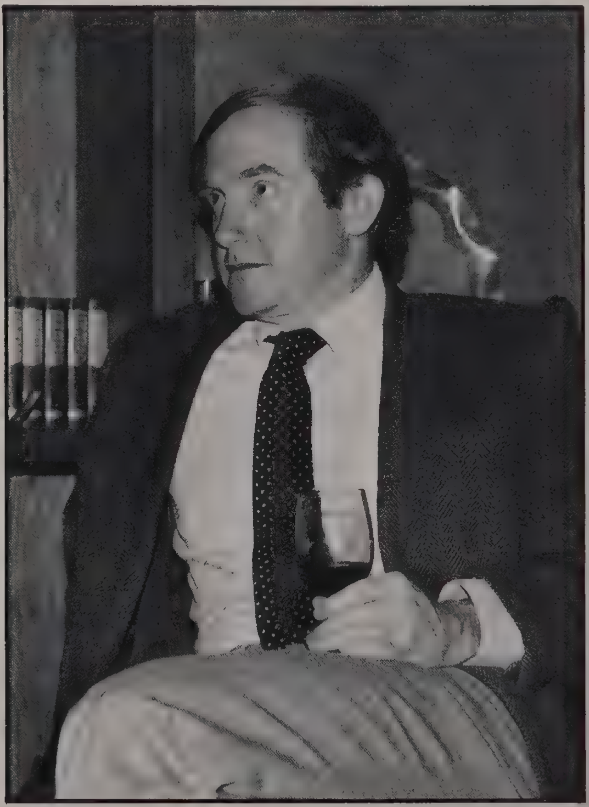
The Engel Society was founded in 1966 in memory of Dr. Frank Libman Engel, who served as Professor of Medicine and Associate Professor of Physiology at Duke University School of Medicine from 1947 until his untimely death in 1963. Dr. Engel and his twin brother, George, who became Professor of Medicine and Psychiatry at the University of Rochester, spent many of their formative years in the medical household of their uncle, Emanuel Libman, in New York. This extremely stimulating, intellectual environment, filled with personal contact with the leading medical giants of the time, prepared the Engel twins for their stellar performance as students at Johns Hopkins, interns at Mt. Sinai, and for their productive later years. Frank worked at Yale under C.N.H. Long, a distinguished biochemist particularly interested in the adrenal glands, where be blossomed as a gifted investigator in the physiology of shock. Dr. Eugene A. Stead, Jr. recruited him to Emory where he worked on adrenal physiology and developed his reputation as a superb basic scientist and adept clinician. He came to Duke in 1947 and proceeded to inspire generations of Duke medical students to his high standards of excellence and scholarship in the broadest sense of the word. Engel demonstrated an intellectual curiosity, a perpetual drive to perfection in problem solving and a genuine desire to explore and ultimately comprehend new areas of knowledge. He was an avid reader of both basic science and clinical literature, amazing in his ability to remain always current with the latest in medical research. His ability to instill his own excitement with the application of basic science knowledge to clinical problems led numerous students to broaden their interpretation and translation of basic principles in the realm of clinical medicine. Engel would get to the crux of any problem, proceeding with a very critical eye.

In the midst of this awesome intellect, he had a most mild and charming manner, and he always found time to speak with people and make them feel important. He loved to work with students and his intense, tenacious attitude about intellectual achievement, his awesome fund of knowledge, were tempered by his mild manner and humanistic approach. His attractive wife, Mildred, lent a helping hand at home and in the laboratory, and between them they produced Susan, a talented pediatric endocrinologist.

After his unexpected death in 1963, several colleagues at Duke established a memorial fund. The suggestion of an annual memorial lecture or an award to a student or research fellow were discarded in favor of a living society of students and faculty, patterned after the Boylston Society of Harvard Medical School, to promote the exchange of ideas of medical interest between students and faculty in an atmosphere of conviviality, so that students could gain not only from the factual information of their professors but from the experiences which are such a crucial foundation of professional life. The Engel Society, established in 1966, gives to its members a means to gain a better understanding of medicine in all of its relations to the world at large.

While each student at Duke might enjoy and benefit from membership, it was essential to the idea of free and equal interaction of students and faculty that the number of members be kept small. Six students from the sophomore class and four faculty are elected each spring by the 24 Society members to replace the six outgoing seniors and four faculty who have finished their three-year term. It is hoped that members will have demonstrated a high degree of scholastic ability, a genuine interest in scholarship in the broadest sense of the word. They should possess, as did Dr. Engel, a genuine desire to inquire, comprehend and ultimately explore new areas of knowledge, concerning medicine directly or indirectly. The Society has provided fraternity and exchange of experience between faculty and students on a superior level and remains one of the most valuable assets of Duke University.

L. to R.: J. Porter, M. Neuss, guest speaker, E. Alexander



E. Holmes

Charter Members 1966

Dr. Bernard Amos
Dr. Frank H. Bassett, III
Dr. Morton Bogdonoff
Dr. Rubin Bressler
Dr. Fred A. Crawford
Dr. H. Sykes Dehart
Dr. W. Edwin Dodson
Dr. William G. Elmore
Dr. Frederick J. Elsas

Dr. John Flaherty
Dr. Elsie J. Freeman
Dr. J. William Futrell
Dr. James F. Glenn
Dr. Donald B. Hackel
Dr. Richard I. Katz
Dr. Jack L. Kostyo
Dr. Michael Levine
Dr. William S. Logan

Dr. Harry T. McPherson
Dr. William P. J. Peete
Dr. Charles R. Roe
Dr. David Seligson
Dr. Geoffrey K. Sherwood
Dr. Madison S. Spach
Dr. Robert S. Stempfel, Jr.
Dr. Hugh H. Trout
Dr. Salih J. Wakil

Permanent Member and President — Dr. Harry T. McPherson
Secretary — Mrs. Barbara B. Brantley

New Senior Staff 1967-1968
Dr. Frank Bassett
Dr. Rubin Bressler
Dr. James Glenn
Dr. James Sidbury
Dr. M. Paul Capp
Dr. Paul A. Elbert
Dr. Robert Hill

New Students 1967-1968
Bertman Goldberg
Richard Gellar
Eddie L. Hoover
Maynard Ramsey
David L. Valle*

New Senior Staff 1968-1969
Dr. Jacob Blum
Dr. George W. Brumley, Jr.
Dr. Richard O. Burns
Dr. Harold Lebovitz

New Students 1968-1969
John K. Crowe
Michael D. Coleman
John A. Horton
William O'Neill, Jr.
Susan M. Scales
William R. Somers
Robert R. Waterbor*

New Senior Staff 1969-1970
Dr. Arthur Chandler
Dr. Stanley H. Appel
Dr. Wendell F. Rosse
Dr. Benjamin Trump

New Students 1969-70
Elaine Belmaker
Bill High
Pat Hybarger
Walt Maack
Russ Maulitz*
Walt Cobb

New Senior Staff 1970-71
Dr. Irwin Fridovich
Dr. Jerome Feldman
Dr. George Baylin

New Students 1970-71
Susan Engel
Dana Anderson
James Frey
Michael Pehlke
John Willis
Walt Cobb

New Senior Staff 1971-1972
Dr. Hans Lowenbach
Dr. Nicholas M. Kredich
Dr. William Kelley
Dr. Lois A. Pounds

New Students 1971-1972
Paul C. Bermanzohn
Geoffrey B. Hartwig
Michael R. Nathan
John A. McDonald
Joanne P. Wilson
Leonard A. Zwelling*

New Senior Staff 1972-1973
Dr. Debbie Kredich
Dr. Suydam Osterhout
Dr. James Clapp
Dr. Arthur Christakos

New Students 1972-1973
Dave Troxler
Daphne Allister
Bill Stead
Rick Kopelman
Kermit Simrel
Mike Zellinger

New Senior Staff 1973-1974
Dr. Shirley Osterhout
Dr. Bruce Dixon
Dr. Harold Silberman
Dr. Gert Breiger

New Students 1973-1974
Herb Clegg
Suzanne Graham
Mike Jobin
Genie Kleinerman*
Ned Stoughton
Wendy Gross

New Senior Staff 1974-1975
Dr. Robert Gutman
Dr. Richard Kramer
Dr. Robert H. Peter
Dr. Samual Wells

New Students 1974-1975
Barbara Blaylock
Dave Collins
Susan Creagan
Heather McKee
Demetrios Papadopoulos
Kathy Upchurch*

New Senior Staff 1975-1976
Dr. Robert Anderson
Dr. Bernard Fetter
Dr. John Tindall
Dr. Andy Wechsler

New Students 1975-1976
Linda Austin
Paul Auerbach
Randy Ely*
Richard Klausner
Linda Terry
Neil Trask

New Senior Staff 1976-1977
Dr. Harvey Cohen
Dr. Laura Gutman
Dr. Stanley Appel
Dr. Joseph Moylan

New Students 1976-1977
Lessie Robb-Nicholson*
Kurt Newman
William Newman
Marianne Jackson
Genie Bailey
Gary Bressler

New Senior Staff 1977-1978
Dr. Robert Lefkowitz
Dr. H. Seigler
Dr. Wendell Rosse
Dr. Walter Floyd

New Students 1977-1978
Claude S. Burton, III*
Richard D. Floyd
Esther Costel
John W. Harlan*
Anne Wright
Dale C. Young

New Senior Staff 1978-1979
Dr. Francis Neelon
Dr. Gerald Lazarus
Dr. Ralph Snyderman
Dr. David Caldwell

New Students 1978-1979
Eban Alexander, III*
Michael Norbert Neuss*
Mary Frances Early
Scott Dale Gillogly
Michael Scott Rabkin
Emily Elliott Yarborough

New Senior Staff 1979-1980
Dr. Edward Holmes
Dr. Jimmy L. Cox
Dr. Frank Lecocq
Dr. Judith Andersen

New Students 1979-1980
Pamela L. Bowe
Peter Bressler
David M. Harlan
Gregory Mencio
Elizabeth Murdaugh
Jan L. Porter

*Moderator

L. to R., Standing: J. Cox, E. Holmes, D. Caldwell, J. Andersen, R. Snyderman, M. Neuss, D. Harlan, P. Bressler, G. Mencio, B. Murdaugh, M. Earley, P. Bowe, J. Porter, S. Gillogly, W. Floyd, H. Seigler, F. Lecocq; **Seated:** E. Alexander, B. Brantley, H. McPherson, A. Christakos, M. Rabkin.

FIRST CONTACT

The Forum for Primary Care

First Contact, now in its fifth year of publication, began as a vehicle for medical students to discuss issues in primary care. It has since expanded in scope and in volume of distribution, printing articles concerned with the political and social aspects of medicine, and allowing students to share their personal experiences in health care delivery. Recent articles have focused on topics such as holistic health, aging, rape, occupational health, the public health problems of nuclear war and the special concerns of blacks, women and gays in health care.

First Contact is written by health professions students and is distributed widely within the Medical Center, to Duke pre-med students and to several hundred subscribers nationwide. The experience of coherently expressing ideas about alternative and socio-political aspects of health care is an invaluable one for *First Contact* contributors and editors. Organizing, editing and putting together the final copy of an issue is a creative addition to the daily structure of health profession training.

The edit group of *First Contact* is oriented to increasing communication between the many different types of health care students in the Medical Center. We welcome comments, articles and editorial help, and can be contacted at Box 2914, DUMC.

We gratefully acknowledge the generous financial support of the Commonwealth Fund and the Department of Community and Family Medicine.

Nuclear Holocaust

As a Public Health Problem

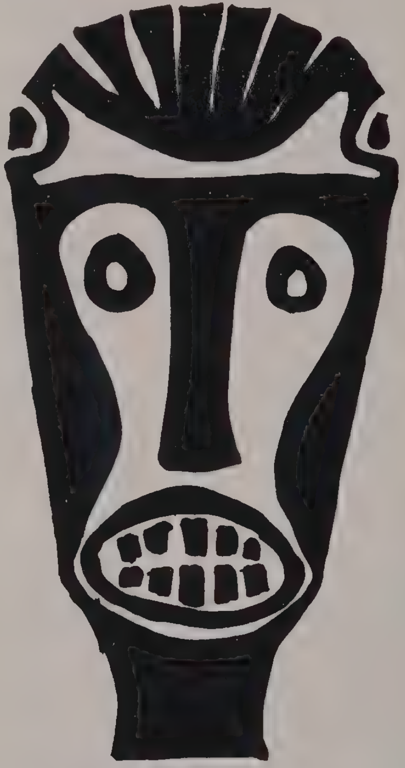
by Matthew W. Gillman

FIRST CONTACT

The Forum for Primary Care
Box 2914
Duke University Medical Center
Durham, NC 27710

Edit Group:
Marcia Angle
Tommy Lee
•Gilda Lorenson
Eric Reiman

Published six times during the academic year 1979-80 by the Forum for Primary Care, a non-profit, student organization at the Duke University School of Medicine. Printed by the Regulator Press, Durham.



From painted wooden mask—Cameroon.

MELANOGENESIS

Special: Blacks in Medicine

Medical Education as a Mind Bender

"Changes in the Professional Orientation of Medical Students From Freshman to Senior Year"

by Jane Leserman, Ph.D.

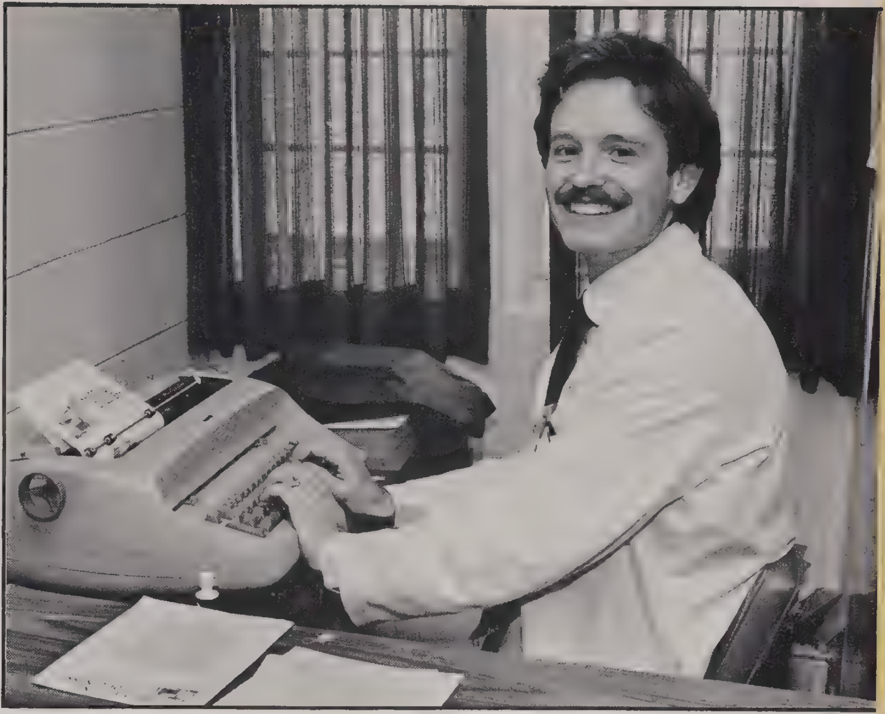
Special: "Woman M.D."

SHIFTING DULLNESS

dullness, shifting: the movement of the sign elicited by percussion when free fluid changes its position as the patient is moved.

Shifting Dullness, a weekly publication funded by the Davison Society, is the official newsletter of the Duke University of Medicine. The publication was founded in the late 1960's. It serves as an important vehicle for the dissemination of information regarding medical students and their affairs. Included in each issue is a medical puzzle, a source of entertainment for students during afternoon lectures.

For your entertainment a reproduction of one of this year's most difficult puzzles is given here. Fill in the diseases which correspond to the eight clues below. Then use the letters to the side of each word and the numbers below the spaces for each word to fill in the quote outlined in the boxes. If you can complete any of the words of the quote before you name the diseases, then the corresponding letters and numbers should aid you in filling in the words of the list.



Dan Siedler, Editor

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	LOVER'S HEEL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	RAILROAD TRACK CALCIFICATIONS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	BLUE SCLERAE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MUCOPOLYSACCHARIDOSIS WITHOUT RETINAL PIGMENT EPITHELIAL DEGENERATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	SYNDROME OF OCULODENTODIGITAL DYSPLASIA
1 2 3 4 5 6 7 8 9 10 11 12 13	SCHAUMANN'S BODIES
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	HÜRTHLE CELLS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	DISEASE WITH CEREBELLAR AND RETINAL COMPONENTS

E-8	F-3	G-3	C-19		E-21	A-2		G-11	D-13	H-1	B-12		F-8
B-3	C-22	F-1	G-8			H-11	C-3		H-5	D-8		E-11	A-13
D-1	C-15	C-1	E-26	A-5	H-13		B-6	C-18		G-18		F-1	E-15
B-11	D-9		E-17	A-15	H-14	F-13		E-18	E-19	E-20		G-6	
H-7	G-14	B-16	D-3		F-2	C-18		H-9	B-2	C-8	C-6	F-7	

Answer to Across-Tic: "Here we have a baby. It is composed of a bald head and a pair of lungs." Eugene Field

INTRAMURAL SPORTS

The intramural sports program at the medical school has enjoyed a Renaissance over the last two years. Traditionally, the medical school could be counted on to finish at the bottom, the New York Mets of the IM world. Thanks to some aggressive organizing, however, this has been reversed. Much credit goes to Eddie Miller MSIV, who as sports manager in 1978-1979, turned the program around. Participation increased dramatically as did the win-loss record.

Highlights of the season included 1st place in both singles and doubles in table tennis, two 1st's in wrestling, and 2nd places in touch football, golf, and co-rec volleyball. Other points were scored by the men's volleyball teams, racketball, and in basketball. The medical school as a whole finished an impressive 5th overall and took the graduate school overall points championship.

The 1979-1980 season was another successful one. Following Eddie's lead, the sports manager, Mark Ling, organized a very strong group of athletes. Perhaps the high point of the year was the track meet, where the team swept seven of eight 1st places in track events, outdistancing the nearest team 120 points to 55. Similarly, entrants took two 1st's in wrestling and both 1st and 2nd place in singles table tennis.

A 1st place in touch football was denied only by a questionable call on the last play in sudden death overtime. While the dispute went against the medical school, many observers felt otherwise. Other 2nd place finishes were turned in by two strong basketball teams — both the men's and women's — both of which lost in the finals. The cross country team turned in a runner-up performance as well, despite a field of over 200 runners.

Third place or semifinalist performances were added in racquetball, tennis doubles, men's volley ball, and golf. Last but certainly not least, points and enthusiasm were added by all the participants in these and other sports, allowing the medical school to repeat as graduate school champions and advance to third overall in the all-university standings. With many returning participants and a good crop of first year students, continued improvement is expected for next season.

INTRAMURAL SPORTS WINNERS 1979-1980
GRADUATE SCHOOL HIGH POINT AWARD
THIRD PLACE, ALL-UNIVERSITY HIGH POINTS CONTEST

TAG FOOTBALL
"Med School C"
Second Place

Scott Gillogly MSIV
Paul Gores MSIV
John McVicar MSII
Chal Nunn MSIV
Paul Pin MSII
Steve Post MSIV
Joel Puleo MSIV
Alan Shelton MSII
Pat Vogel MSII
Jeff Warren MSII

MEN'S VOLLEYBALL
"Antrium"
Semifinalists

Scott Anderson M.D.-Ph.D.
Mark Ling M.D.-Ph.D.

CROSS COUNTRY CAKE RACE
MEN
Second Place — Team Standings

Rob Harland MSI	4th
Jeff Lease MSI	24th
Rich King MSIV	25th
Quay Snyder MSIII	31st

WOMEN

Julie Lane MSI	4th
Linda Glaubitz MSI	5th

WRESTLING

Dave Albert MSIII	1st
Mitch Silverman MSIV	1st

MEN'S BASKETBALL
"Modern Health Care"
Second Place
Chris Chambers MSIV
Carnell Cooper MSIII
Bob Fleischer MSI
Rich Mainwaring MSII
David Miller MSI
Alan Shelton MSII

WOMEN'S BASKETBALL
Second Place

Laurie Dunn MSIII
Linda Glaubitz MSI
Sue Frederick MSI
Ann McKnight MSIII
Michelle Roberts MSI
Tony Yancy MSI

RACQUETBALL

Dave Allen MSIII
Lamont Wooten MSIII
Eric Newman MSIII
Quarterfinalist
Quarterfinalist
Semifinalist

TABLE TENNIS

Jim Boatman MSI	1st
Eddie Miller MSIII	2nd

TENNIS DOUBLES

Lamont Wooten MSIII & John Lucas MSIII	Quarterfinalist

GOLF

Third Place — Team Standings

Warren Ervin MSIV
Herb Fuchs MSI
Jim Halverson MSII
Hark Haas MSIII
Dale Mathews MSIV
Chal Nunn MSIV

Third Place — Individual
Mark Haas MSII

TRACK MEET

First Place — Team standings

F. Roosevelt Gilliam MSII	1st	100 yd.
Carnell Cooper MSIII	1st	220 yd.
Carnell Cooper MSIII	1st	440 yd.
Rob Harland MSI	1st	mile
William Kraus MSI	2nd	mile
Rob Harland MSI	1st	2 mile*
William Kraus MSI	3rd	2 mile
Carnell Cooper MSIII F. Roosevelt Gilliam MSII Steve Schartz MSIII Jeff Warren MSII	1st	440 relay
Carnell Cooper MSIII F. Roosevelt Gilliam MSII Kemp Kernstine MSII Eddie Miller MSIII	1st	mile relay
F. Roosevelt Gilliam MSII	1st	high jump
Reggie Hall MSII	5th	high jump
F. Roosevelt Gilliam MSII	2nd	long jump
Kemp Kernstine MSII	3rd	discus
Jeff Sourbeer MSIII	5th	discus
Bruce Brasher MSIII	5th	shotput

*New Meet Record

SWIMMING MEET

Lamont Wooten MSIII	3rd

L to R, First Row: Michelle Roberts, Toni Yancey, Coach: Jerry Woods, Anne McKnight, Linda Glaubitz; **Second Row:** Sharon Geyer, Brenda Armstrong, Debbie Budwit, Brenda Barry; **Third Row:** Sue Frederick, Laurie Dunn.

L to R, Rosie Gilliam, Kemp Kernstine, Carnell Cooper, Eddie Miller

STUDENT-FACULTY SHOW

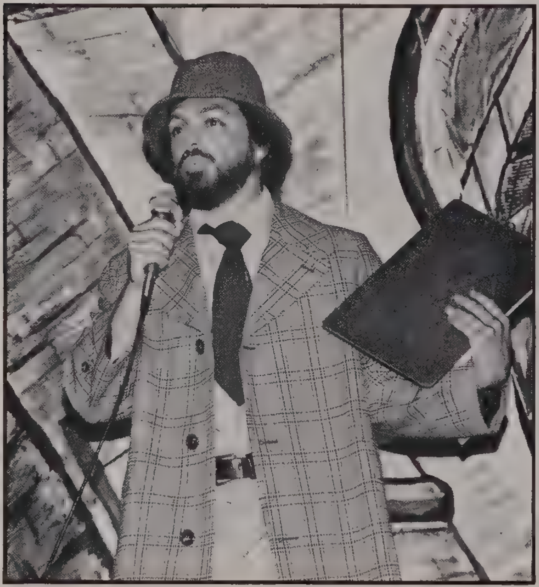
David Howell, Musical Director

The Student-Faculty Show is an annual spring production involving students of all classes and especially the third year students. In this show the hallowed halls of Duke become the target of jokes and comedy skits. Professors who often appear larger than life within the confines of the medical center, become more human and in some cases take on a new and slightly different appearance when seen through the eyes of the students.

This year "DOC: A DOOK-U-MENTARY" involved the talents of actors, writers, dancers, singers, musicians and poets who are disguised as medical students during the rest of the year. With a cast of 50, a band of 15, and numerous others involved in the production and writing, the show examined various aspects of Duke Medical Center and its personnel in a humerous, hilarious and often irreverent way. And even if some of the jokes did not go over very well, 35 kegs of free beer made sure that by the end no one cared.

T. Stanley, Alan Crimm, Ken Riley, Dave Simel

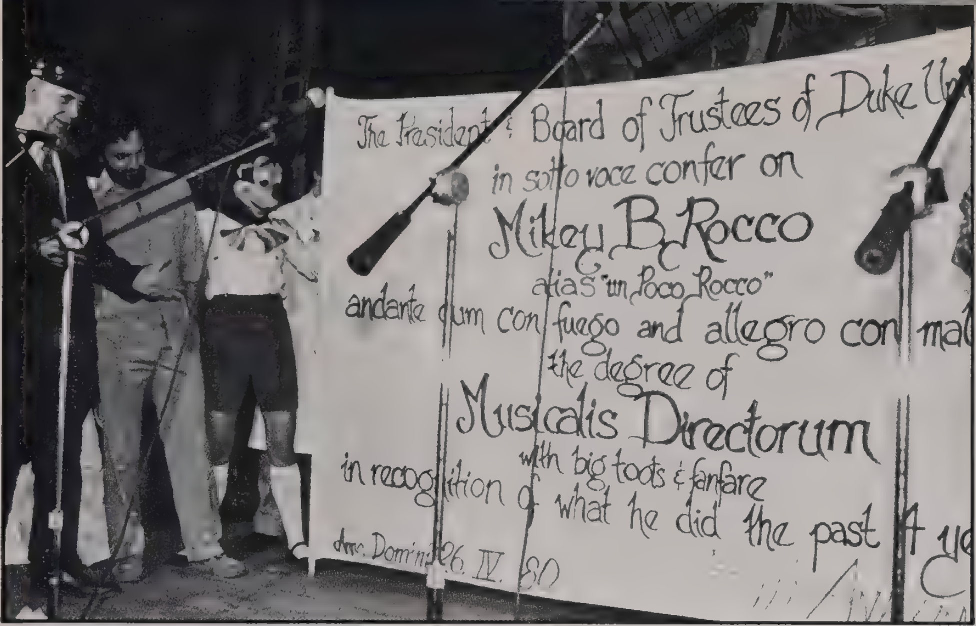
Dave Allen, Orchestration


Michael Rocco, Director

Gina Michaels, Kemp Kernstine, Katie Miller, Jan Neal, Jackie Rutledge

Jeff Warren, T. Stanley

Steve Levine, Jeff Warren


The President & Board of Trustees of Duke U
in sotto voce confer on
Mikey B. Rocco
alias "un Poco Rocco"
andante cum con fuego and allegro con ma
the degree of
Musicalis Directorum
with big toots & fanfare
in recognition of what he did the past 4 ye
Anno Domini 26. IV. 80

Dr. Fetter, Mike Rocco, Mickey Mouse

Stephen Keener, Renata Albrecht

Dave Sabiston

Mark Komrad, Dana Rosenberg

Jackie Rutledge, Craig Haug, Katie Miller

Matt Gillman, violinist, Marsha Adams, clarinetist

Frank Spence

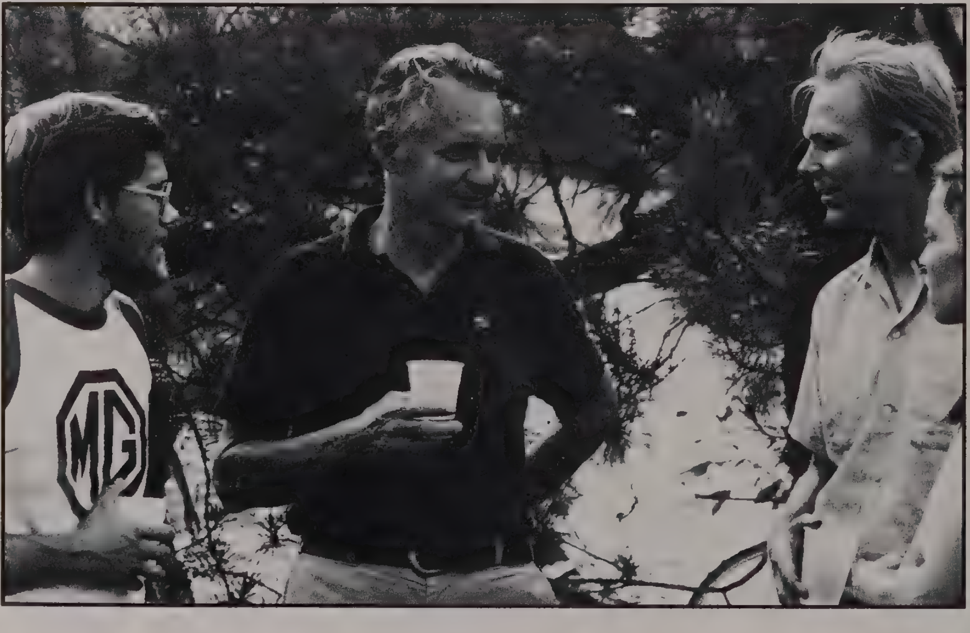
Bit player, Bill Anlyan

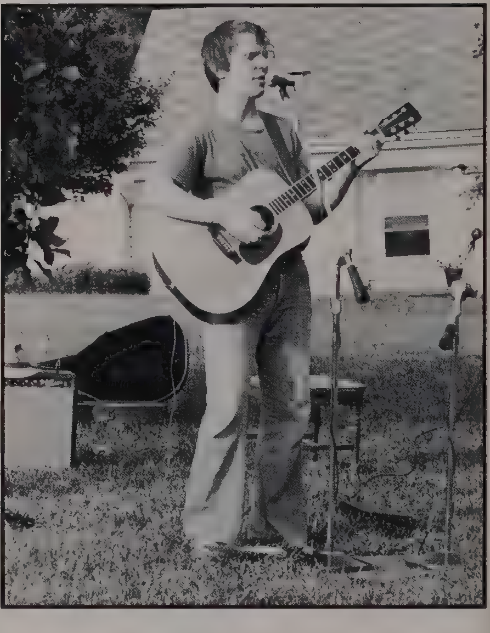
Bernard Fetter

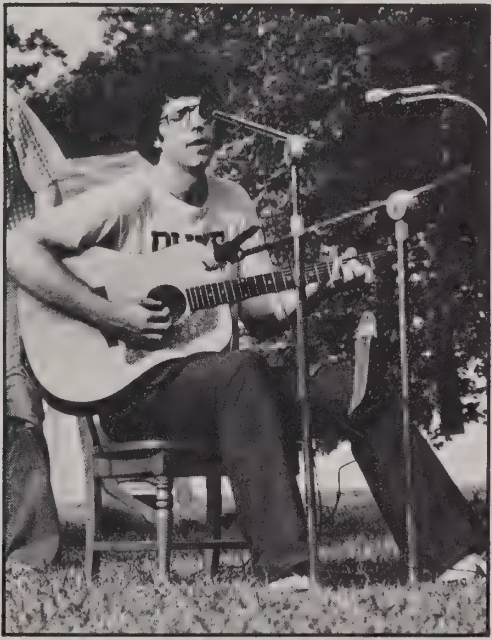
Eddie Miller, Roy Parker

PIG ROAST

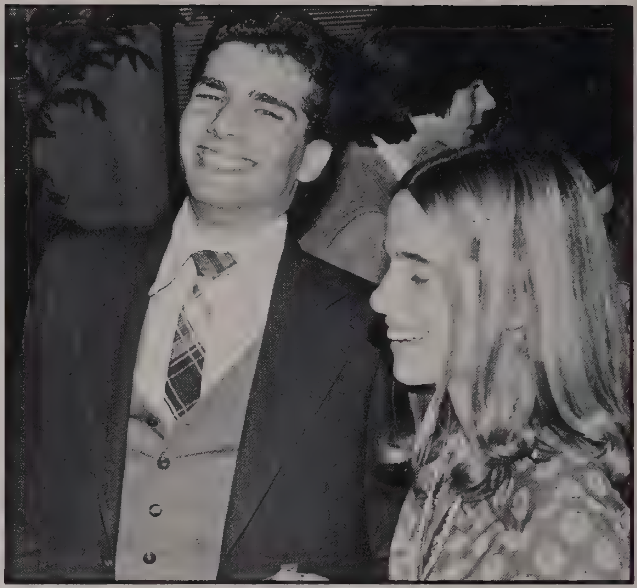
For the past three summers, we have been fortunate enough to enjoy a finger-lickin' good pig-pickin', hosted by Dr. Vogel at his farm. The pigs have been bought and roasted to perfection over a charcoal fire by Joel Puleo. Here are a few shots that record the multitudes enjoying volleyball, singing, sunbathing, softball, and most of all eating. Attended by over 200 students and medical center personnel, this has been the highlight of these past summers. We hope that those who follow will have the opportunity to attend such a delightful affair.

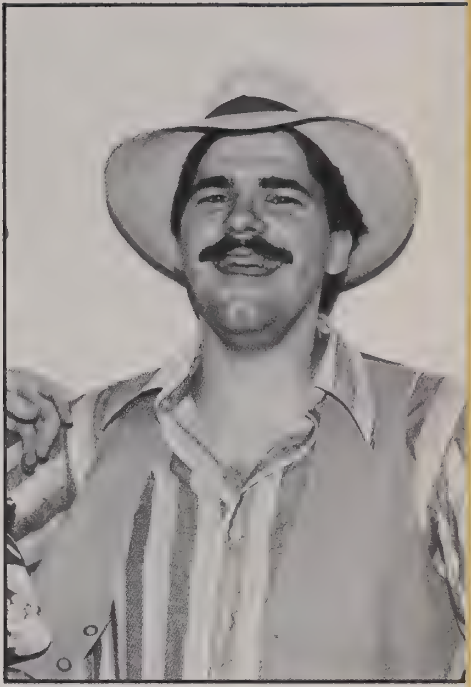


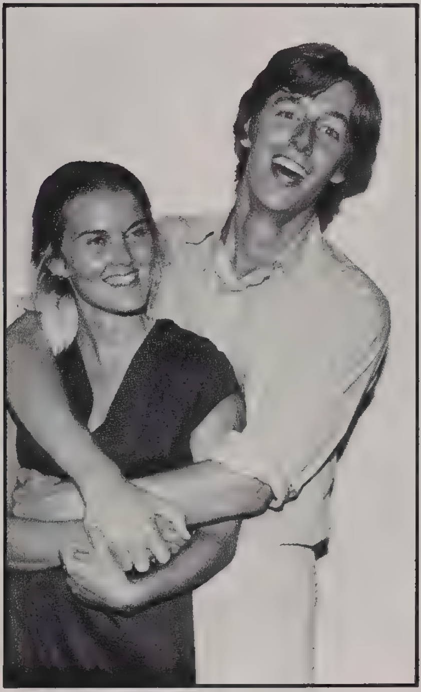




PARTIES

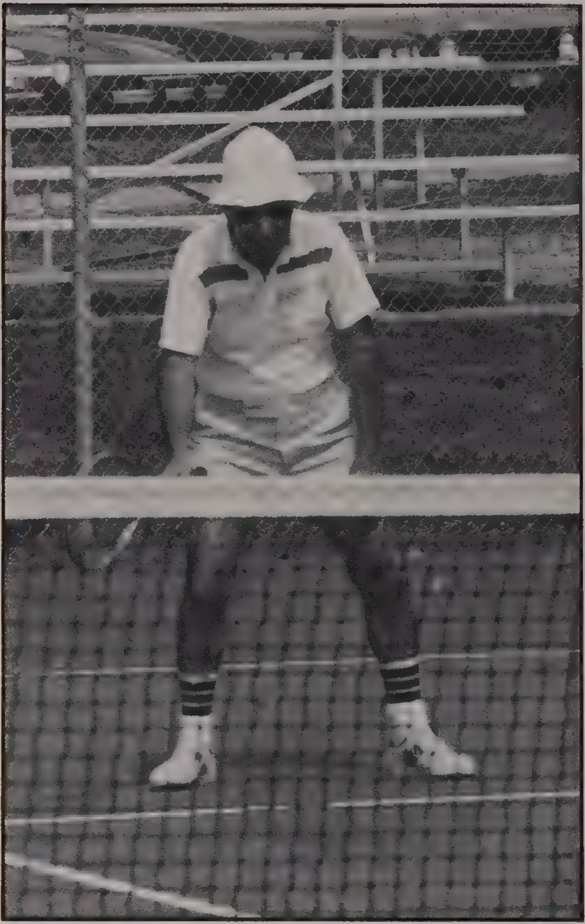


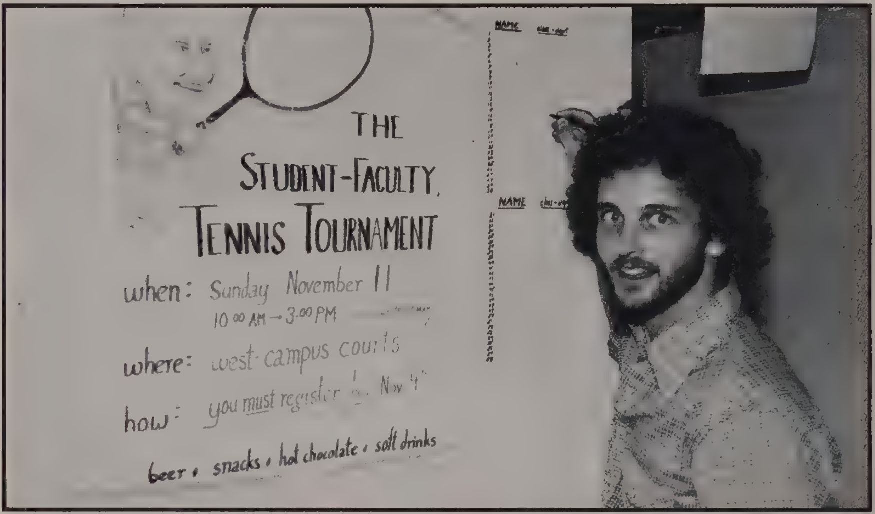




STUDENT FACULTY TENNIS TOURNAMENT

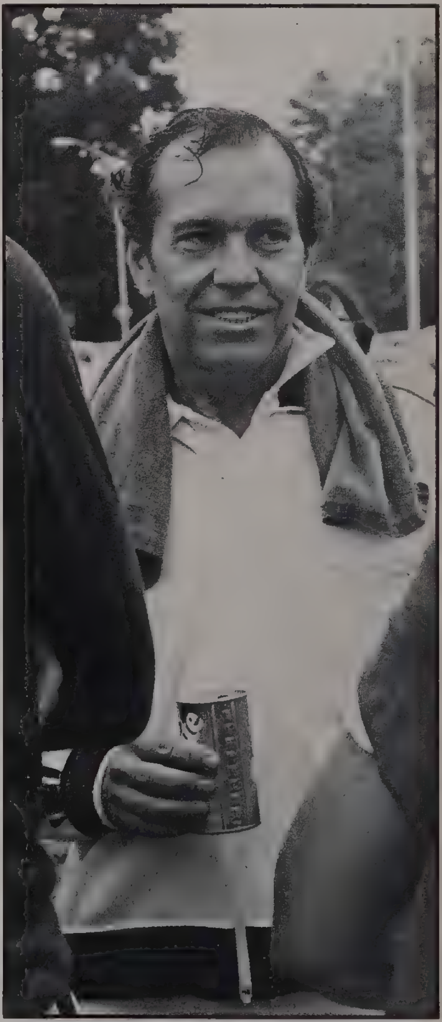
One of the highlights of the sports season is the semi-annual Student-Faculty Tennis Tournament. The evening before the big event,"Poncho" Bill Anlyan graciously hosts an informal cocktail party where students and faculty mix and mingle. The evening culminates in the unveiling of the tournament pairings and the teams, which consist of one student and one faculty member. Amid ample quantities of beer, chips, and soft drinks, the contest begins with everyone playing round-robin matches in divisions of eight teams each. The top teams from these divisions are then matched up for a single elimination finals. At the day's end the tennis champions emerge, but even the losers are winners if they took advantage of the opportunity to establish new friendships.


"Pancho" Bill Anlyan


THE
STUDENT-FACULTY
TENNIS TOURNAMENT
when: Sunday November 11
10:00 AM → 3:00 PM
where: west-campus courts
how: you must register by Nov 4
beer, snacks, hot chocolate, soft drinks
NAME
NAME
David Milbauer

Andy Wechsler, William Thompson

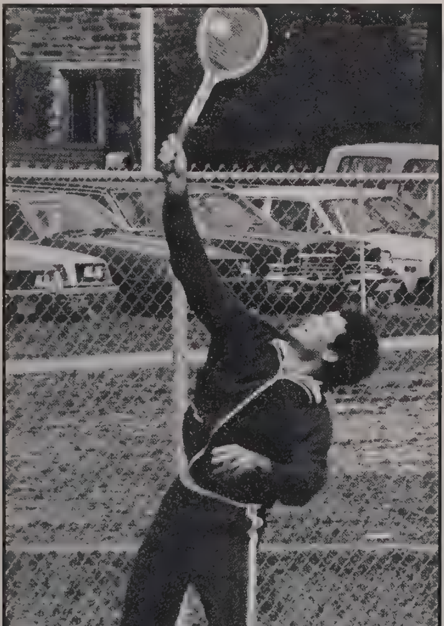
Crowd at tennis finals


James Wyngaarden

Joe Moore

Warren Olanow, Andy Wechsler

Harry and Susie Gallis


Chip Davis

Joe Moylan, Dave Robinson

EAST END HEALTH CENTER

In December of 1978, the Edgemont Community Clinic closed after ten years of continuous operation as a free, community clinic. The clinic, staffed by volunteer health core professional students and consulting physicians, was founded in 1968, at the request of the lower-income neighborhood that it served. The clinic addressed health problems as they were expressed by the community and became a symbol of community spirit.

Multiple factors led to the closing of the clinic. A large portion of the neighborhood population had been lost due to industrial expansion. Community participation in the operation of the clinic diminished. The old building which housed the clinic deteriorated beyond practical repair, and regretfully the staff voted to close at the end of 1978.

Members of the staff were determined, however, to keep Durham's only free clinic alive, and the search began for a cohesive neighborhood that would provide support for a community health center. The East End Health Center was the result of this search.

The East End is a low-income, H.U.D. target area. Like most low-income, minority neighborhoods, is has major health problems which are inadequately addressed by traditional health care systems. Diabetes mellitus, hypertension, obesity, traumatic injuries, dental caries, visual problems, childhood amenia, prenatal and infant morbidity are just a few examples of such problems.

These health problems are primarily a result of poor education, poor nutrition, poor sanitation and the violence of poverty. And because poor people have limited access to health care and only seek out medical attention for acute emergency health problems, the traditional health care industry is unable to confront the sources of poor health for impoverished communities.

The East End Health Center is serving several purposes:

1. It is attempting to address the health needs of the community which are not met by the larger teaching hospitals and private practitioners in Durham.
2. It is providing free, readily accessible medical care to the residents of the East End Community and others.
3. It is providing consumer education about common medical problems, the health care system, and existing services available to community members.
4. It is a source of pride to the neighborhood and has instilled in the community a sense of self-reliance.
5. It is providing the opportunity for professional health care students of local universities to participate in community health care programs, to gain experience as members of a health care team and to participate in a joint endeavor with low-income residents of the city in which they live.

The EEHC, Inc. is a community-run, free outpatient clinic with pharmacy and laboratory services. It is voluntarily staffed by physicians, medical and allied health students, pharmacists, lab technologists, social workers, nutritionists, and other health professionals. Community members participate in all phases of operation of the Clinic.

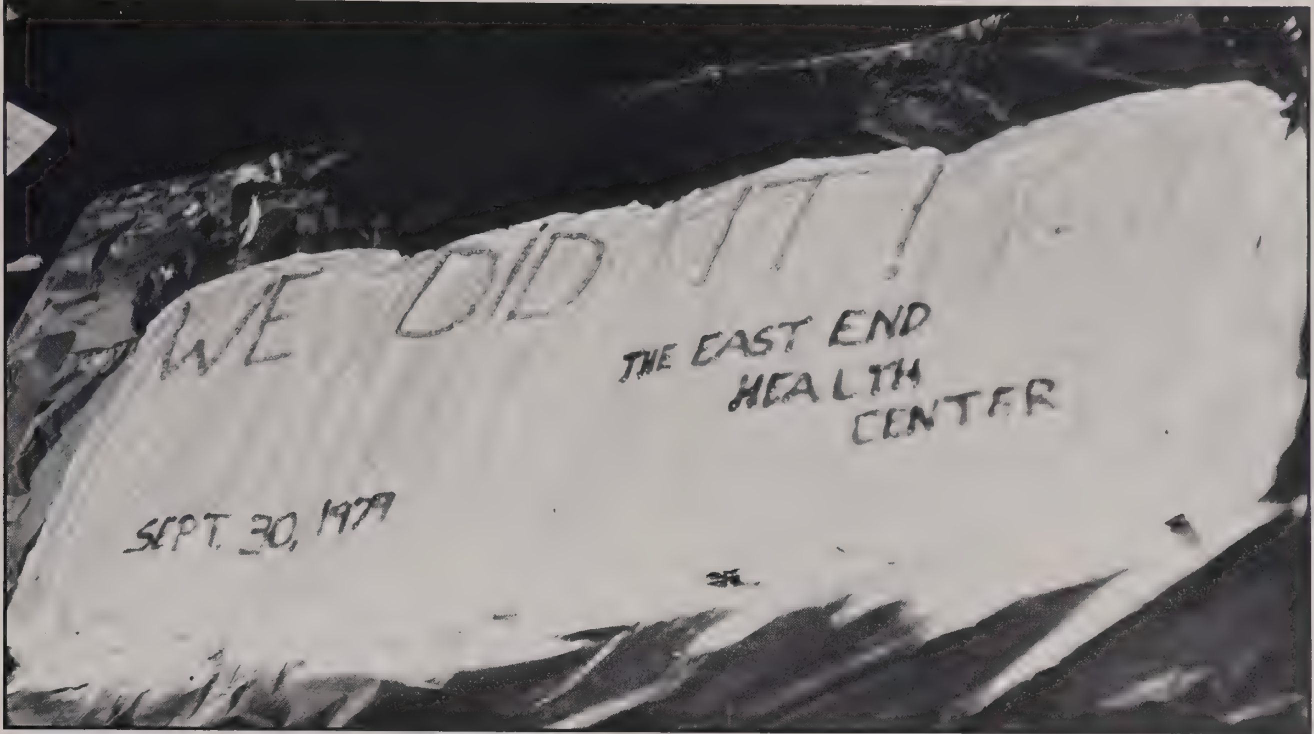
The EEHC provides consumer education on health problems such as diabetes, hypertension, venereal disease, nutrition, alcoholism, and drug abuse. This is done through teaching sessions utilizing audio-visual aids, pamphlets and discussions. A major emphasis is placed on preventive medicine using screening sessions as a tool.

When social or medical problems arise that require alternative services we refer patients to the appropriate facilities and assure adequate transportation, assistance, and follow-up.

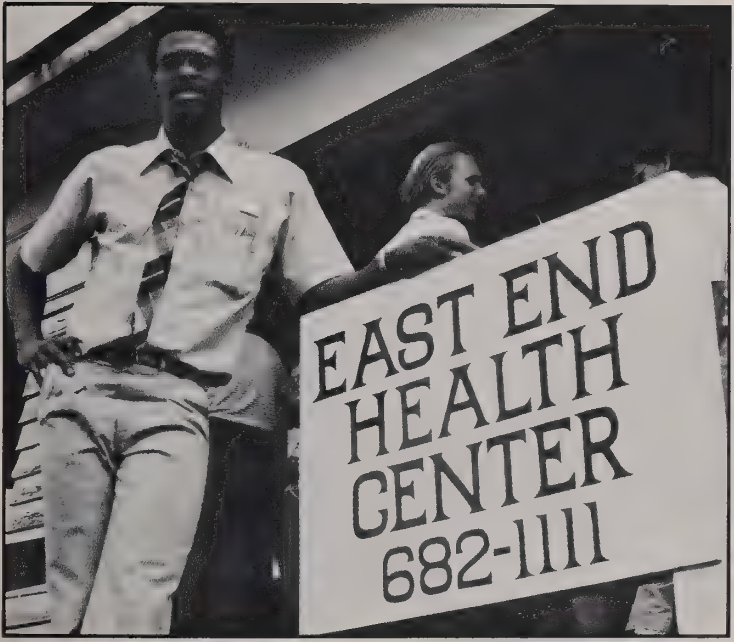
The EEHC is providing needed health care to residents of the East End Community. The enthusiastic cooperation that exists between Community members, students, and physicians is enabling the Health Center to deliver quality health services. The innovative structure combines medical care, consumer health education, preventive medicine, and other supporting services delivered by an all-volunteer staff.

Carnell Cooper

Clockwise from bottom left: Jane Weidele, Betty Goldberg, Lisa Lattal, Carnell Cooper, Linda Woodard, Nancy Fitch



Victory Cake



Carnell Cooper

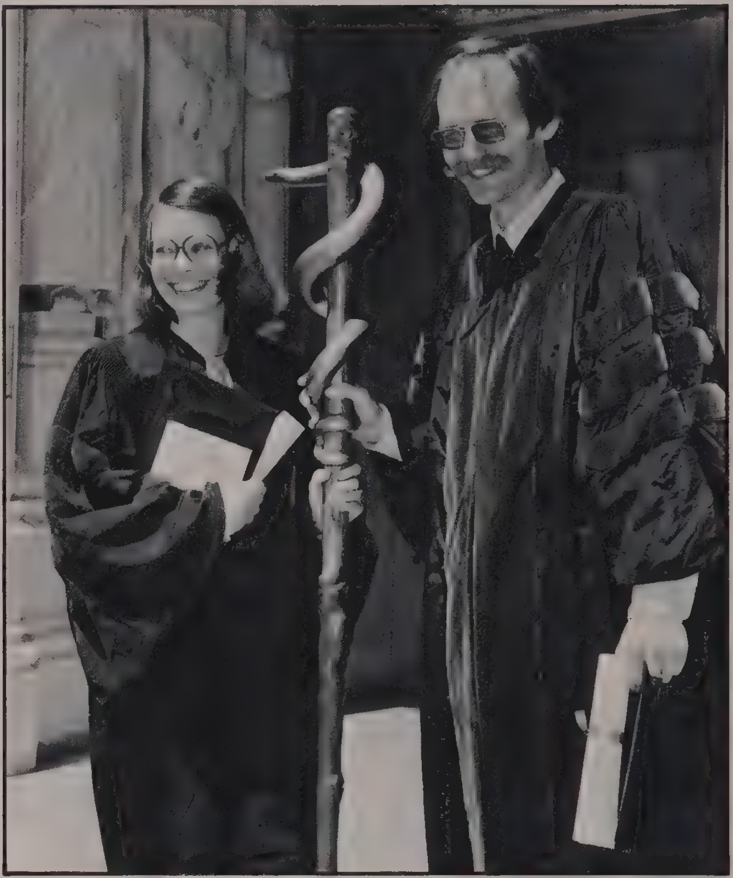
Board of Directors of East End Health Center

Sid Gospe

Marcia Angle cuts cake

GRADUATION 1980

William Bell



Rebecca and Richard Brasington

Lillian McKay, Kathy Thompson

Robert Ziegler, Robert Becker

Crowd in front of Chapel after Hippocratic Oath Ceremony

GRADUATION AWARDS 1980

SANDOZ AWARD	David E. Attarian
UPJOHN AWARD	Nancy E. Fitch
LANGE MEDICAL PUBLICATION AWARD	Stephen G. Ryan Robert E. Ziegler
THOMAS JEFFERSON AWARD	Michael B. Rocco John H. Rutledge, II
IRWIN A. BRODY NEUROSCIENCES AWARD	Herbert H. Engelhard
C.V. MOSBY BOOK AWARD	Allan L. Crimm Thomas R. White Steven A. Wool
MARKEE ANATOMY AWARD	Ronald H. Gottlieb
DAVISON SCHOLARSHIP	Isabelle A. Wilkins
TRENT HISTORY OF MEDICINE AWARD	Michael E. Mabry Dale A. Matthews
AMERICAN MEDICAL WOMEN'S ASSOCIATION	Linda J. Abbey Eleanor H. DeWitt Mary F. Early Nancy E. Fitch Lynn C. Froome Janet Y. Russell
CIBA AWARD	Nancy E. Fitch
INTERNATIONAL COLLEGE OF SURGEONS AWARD	Herbert H. Engelhard
KAISER FOUNDATION NATIONAL MEDICAL FELLOWSHIP	Norma C. Lemon

ALPHA OMEGA ALPHA

INDUCTED THIRD YEAR

Linda J. Abbey
Alfred A. Show Ping Chu
Mary F. Earley
Paul A. Foster
Richard G. King
Michael B. Rocco
Janet Y. Russell
Robert W. Van Dalen
Thomas R. White

Ph.D.

Peter J. Sims
Kenneth F. Troffatter, Jr.
Robert E. Ziegler

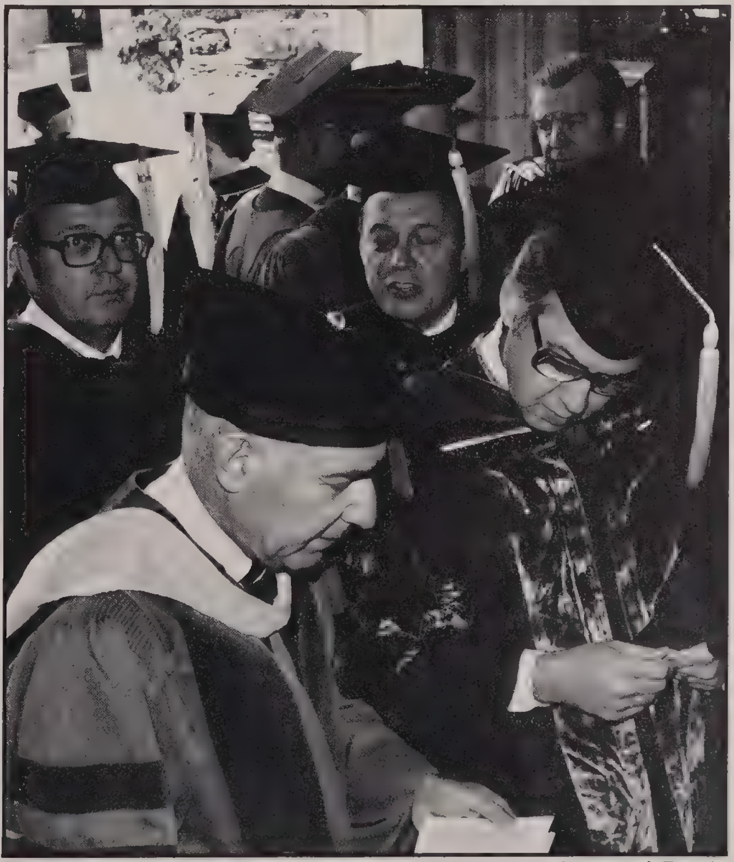
INDUCTED FOURTH YEAR

Eben Alexander, III
David E. Attarian
Janice L. Bird
Charles E. Coffey
Ralph J. Damiano, Jr.
Nancy E. Fitch
Lynn C. Froome
Thomas B. Gore
Michael N. Neuss
Stephen G. Ryan
Ronald G. Washburn

M.D./J.D.

John H. Rutledge, II

L to R: Dr. Roy Parker and Dr. Robert Hill



L to R: Dr. T. Thompson, Dr. W. Anlyan, Dr. S. Osterhout, and Dr. A. Christakos

50TH
ANNIVERSARY
1930-1980

STUDENTS

Each class in the Duke University School of Medicine has 115 students of which about 10 are in a combined degree program — M.D.-Ph.D., M.D.-J.D., M.D.-M.P.H. Each year of medical school life is different and brings new experiences and knowledge. First year students spend their waking hours with books, and one might even think that some have taken up residence in the library. Second year students learn to spend not only their waking hours but also their sleeping hours in the hospital as they complete the required clinical rotations. Students in their third year expand their medical knowledge in areas of their interest — by taking courses, doing research, or a combination of the two — and find time to do things they had only dreamed about doing during their first two years. This is also the year that most combined degree students break away from the normal four year medical school curriculum to begin their work in the area of their second degree and start to consider themselves to be part of the class of combined degree students. Finally, in the fourth year students begin to realize the responsibility that they will assume in less than a year and begin to prepare for that day in earnest.

Class by class, in the next 100 pages we have tried to capture some of the moments — studying, relaxing, partying, working — in the lives of these students in Duke Medical School. Special thanks are due Meg Richardson for her work on the section for the first year class, Gina Michael for the second year class, Berrylin Ferguson for the third year class, Barbara Hodge for the fourth year class, Jim Walsh and Val Lightner for the combined degree class and especially to John Lucas for his untold number of hours in the darkroom.

10

STUDENTS

Class of 1980 389

Class of 1981 411

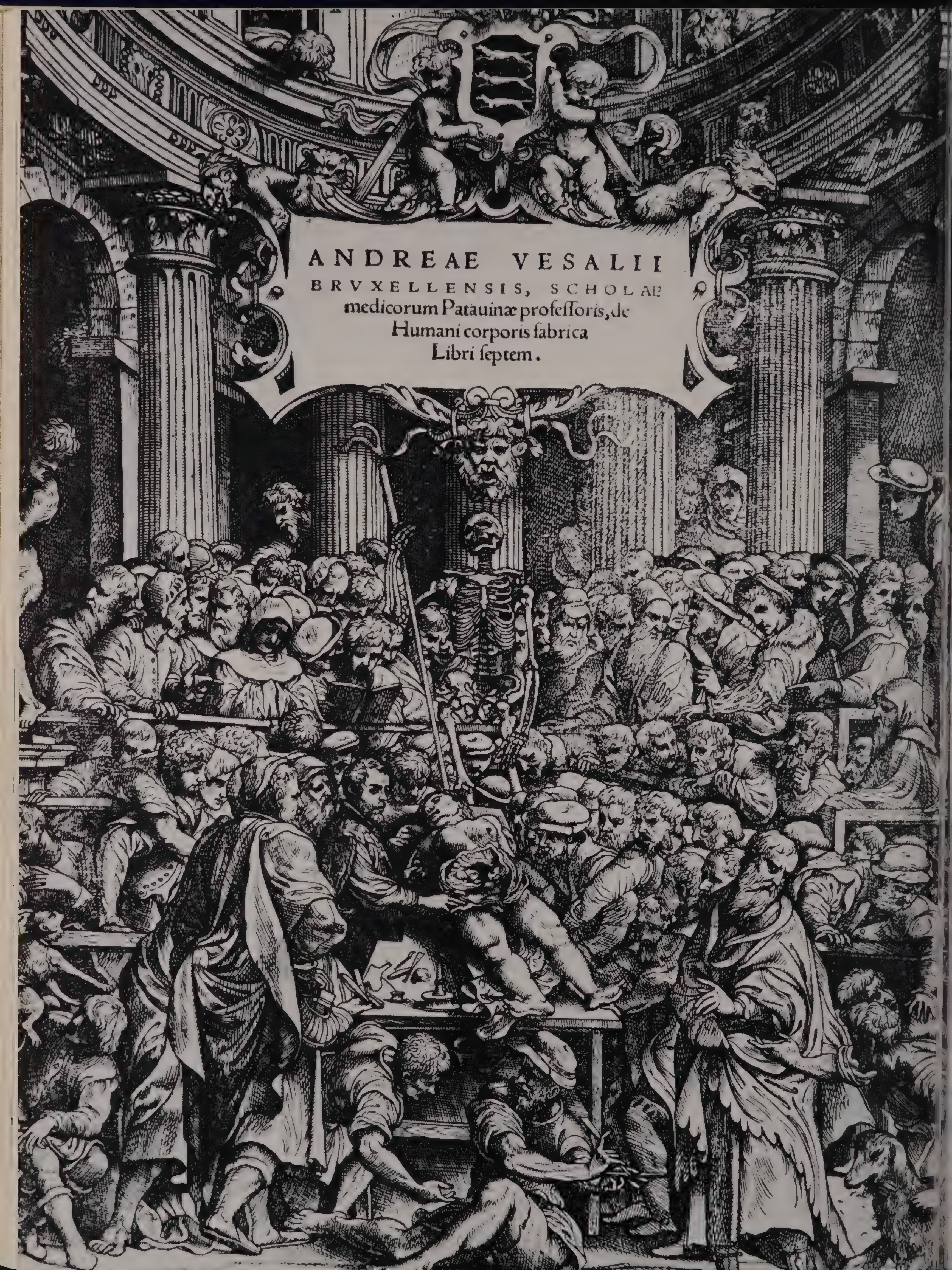
Class of 1982 433

Class of 1983 451

Combined Degree Students 469

C.T.F. 481

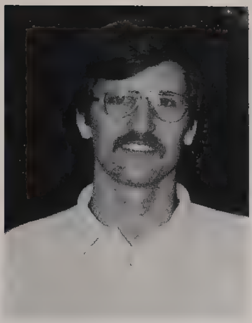
Section Editors
Barbara Hodge
Berrylin Ferguson
Gina Michael
Meg Richardson
Jim Walsh
Val Lightner



ANDREAE VESALII
BRVXELLENSIS, SCHOLAE
medicorum Patauinæ profeſſoris, de
Humani corporis fabrica
Libri ſeptem.

CLASS OF 1980

Linda Abbey
Muhlenberg College
Somerville, N.J.
Family Practice
M.C.H. S. Carolina



David Abernathy
Earlham College
Little Rock, Ark.
Internal Medicine
Univ. Hosp. of Ark.

Manuel Aguilar
Duke University
San Jose, Costa Rica
Surgery
Grady Mem. Hospital

Eben Alexander, III
U.N.C.-Chapel Hill
Winston-Salem, N.C.
Neurosurgery
Duke Univ. Med. Center

John Alexander
Davidson College
Laurinburg, N.C.
Internal Medicine
Ohio State Univ. Hosp.

Elizabeth Anders
Emory University
Riverdale, Georgia
Pathology
U.C.L.A.

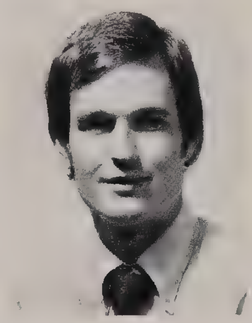
William Andrews, Jr.
Duke University
Norfolk, Virginia
Surgery
Univ. of Virginia

David Attarian
Princeton University
Vero Beach, Florida
Orthopedic Surgery
Duke Univ. Med. Center

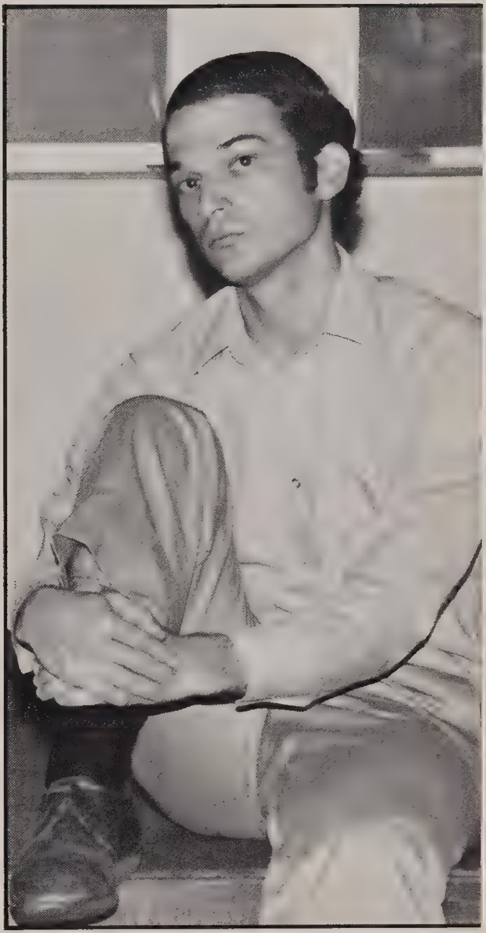
Barbara Basuk
Brown University
Gloversville, N.Y.
Psychiatry
Duke Univ. Med. Center

Charles Beasley
Pembroke St. Univ.
Pembroke, N.C.
Internal Medicine
City of Memphis Hosp.

Robert Becker
Miami Univ. of Ohio
Columbus, Ohio
Pathology
N.C. Memorial Hosp.

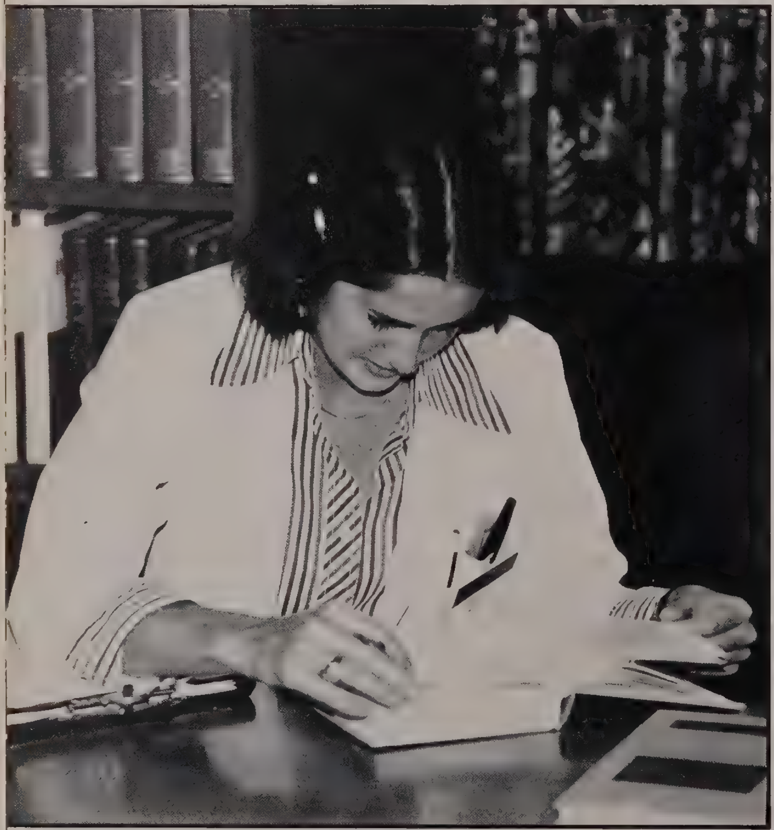


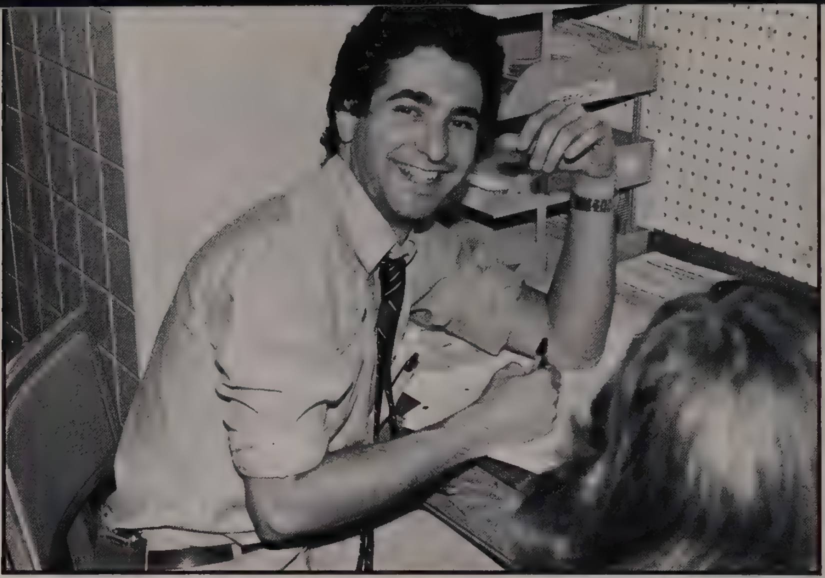
William H. Bell, III
Tulane University
New Bern, N.C.
Surgery
Charity Hosp. of La.



Steve Ryan

Janet Kinney

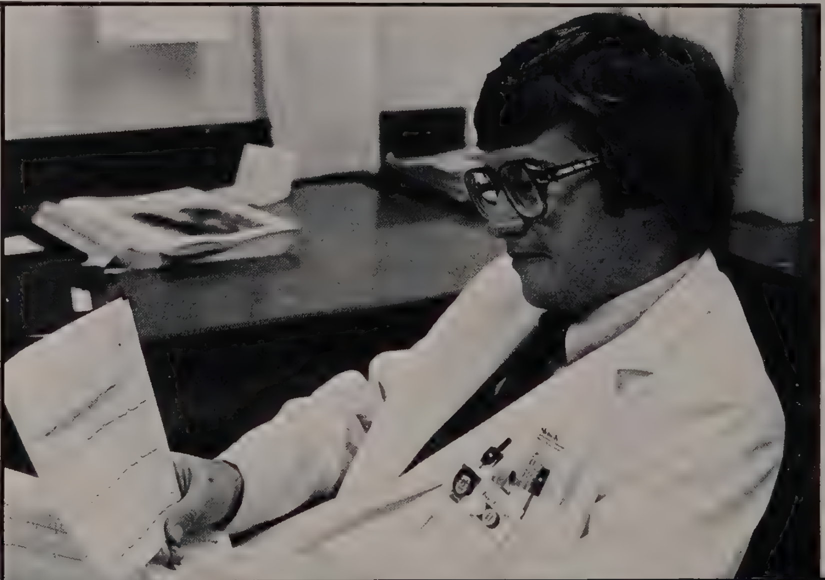

Kathy Thompson


Alan Treiman

Randy Sechrest

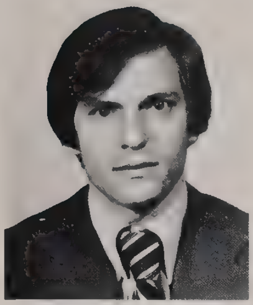
Chris Williams

Tom White



CLASS OF 1980

James K. Bennett
Clark College
Elberton, Georgia
Urology
Grady Mem. Hospital

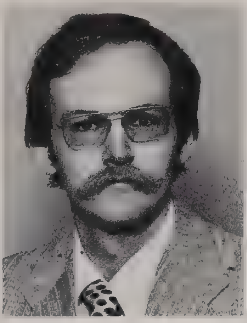


Gabriel Berrebi
Brooklyn College
Brooklyn, N.Y.
Internal Medicine
Univ. Mich. Hosp.

Janice Bird
Duke University
New Carrollton, Md.
Ob-Gyn
Duke Univ. Med. Center

Sara Bodner
Wellesley College
Coral Gables, Fla.
Ped. Pulm/Path.
Duke Univ. Med. Center

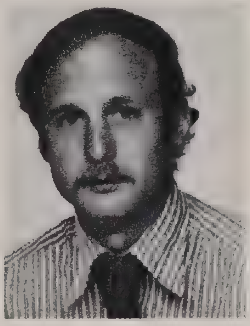
Edwin P. Bounous, Jr.
Duke University
Morganton, N.C.
Cardiology
Duke Univ. Med. Center



Richard Brasington, Jr.
Harvard College
Asheville, N.C.
Internal Medicine
Univ. Iowa Hospitals

James H. Broom
Univ. of Alabama
Hartselle, Alabama
Psychiatry
N.C. Memorial Hosp.

Leslie Brothers
Radcliffe College
Concord, Mass.
Psychiatry
U.C.L.A.



J. Kern Buckner
U.N.C.-Chapel Hill
Chapel Hill, N.C.
Internal Medicine
Univ. of Colo. Hosp.

William B. Bunn, III
Duke University
Raleigh, N.C.
Internal Medicine
Duke Univ. Med. Center

Douglas E. Casey
Univ. Calif.-S.B.
Garden Grove, Calif.
Radiology
Univ. Calif.-Irvine

Christopher Chambers
Princeton University
Wilmington, Delaware
Family Practice
Jefferson University

Hadley Wilson

Kathy Thompson

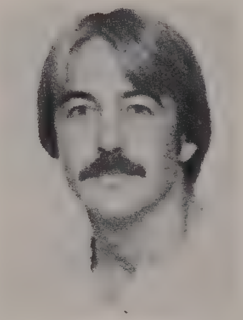
CLASS OF 1980

Caroline Chiles
Mass. Inst. Tech.
High Point, N.C.
Radiology
Stanford University

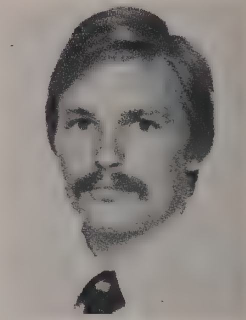
Linda I-Yu Chiu
Princeton University
Baltimore, Md.
Flexible
Highland Gen. Hosp.

A. Alan Chu
McGill University
Scarborough, Canada
Internal Medicine
Duke Univ. Med. Center

Barbara Clark
Yale University
Dearborn, Mich.
Internal Medicine
Maine Med. Center

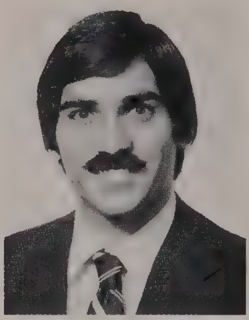


C. Edward Coffey
Wofford College
Durham, N.C.
Psychiatry-Neurology
Duke Univ. Med. Center



Peter C. Cote
St. Univ. N.Y.-Syr.
Syracuse, N.Y.
Pathology
Nat'l. Naval Med. Cen.

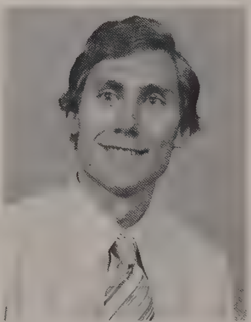
Allan L. Crimm
Yale University
Atlanta, Georgia
Internal Medicine
Hosp. Univ. Penn.



Ralph Damiano, Jr.
Dartmouth College
Vista, N.Y.
Surgery
Duke Univ. Med. Center

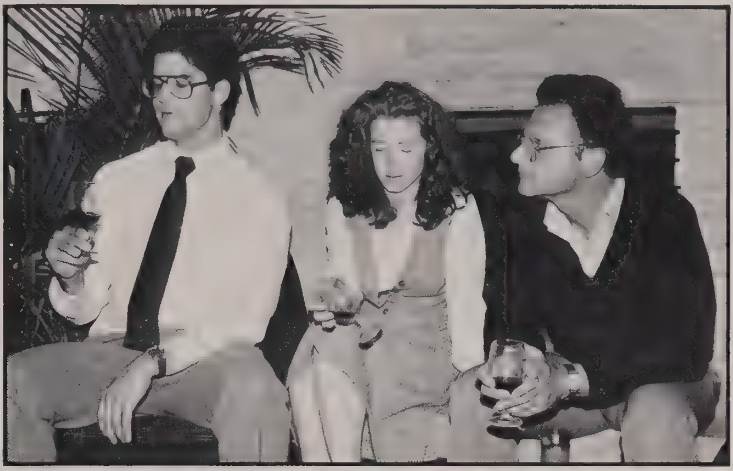
Stephen Denning
Duke University
Rutherfordton, N.C.
Internal Medicine
Univ. Chicago Clinics

Eleanor DeWitt
College of Wooster
New Wilmington, Pa.
Internal Medicine
Univ. Rochester

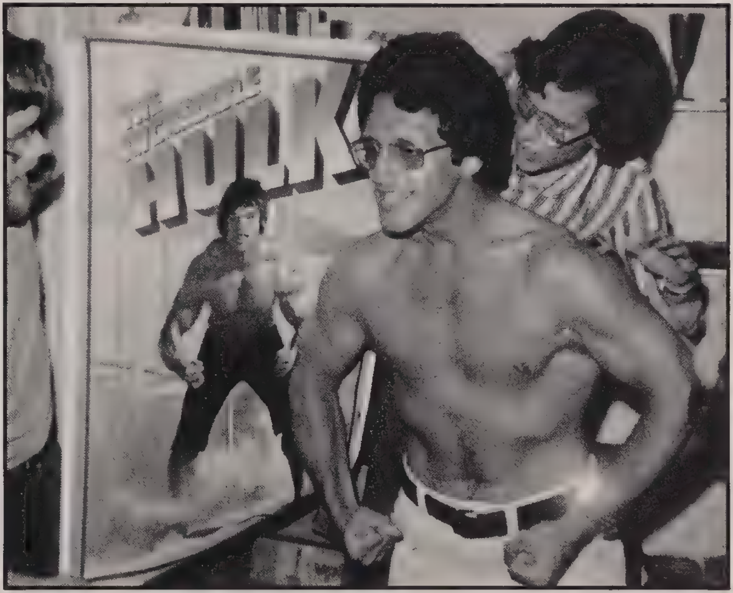


William J. Doyle
Duke University
Cincinnati, Ohio
Ophthalmology
Ohio St. Med. Center

Mitchell Dunn
Duke University
W. Hartford, Conn.
Internal Medicine
G. Washington Univ



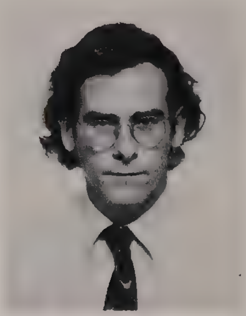
Eben Alexander, Beth Murdaugh, Gerald Lazarus, MD.



Mitch Silverman

Margo Thienemann, Johnny White

Rich Michal (flexing)



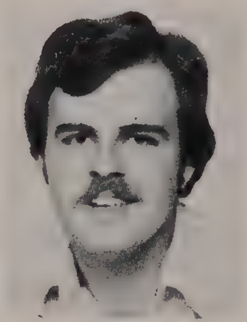
Stephen duRivage
Univ. of Virginia
Lloyd Harbor, N.Y.
Pediatrics
Northwestern Univ.

James R. Dykes
Duke University
Greer, S.C.
Family Practice
Mt. Area H. Ed. Found.

Mary F. Early
Duke University
Garden City, N.Y.
Internal Medicine
Duke Univ. Med. Center

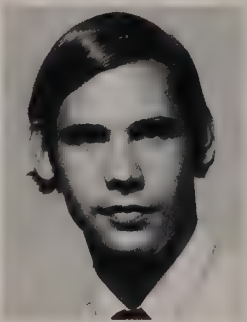
R. Scott Eden
Duke University
Atlanta, Georgia
Family Practice
Duke Univ. Med. Center

Herbert Engelhard, III
Duke University
Northbrook, Ill.
Surgery
Washington Univ. Hosp.

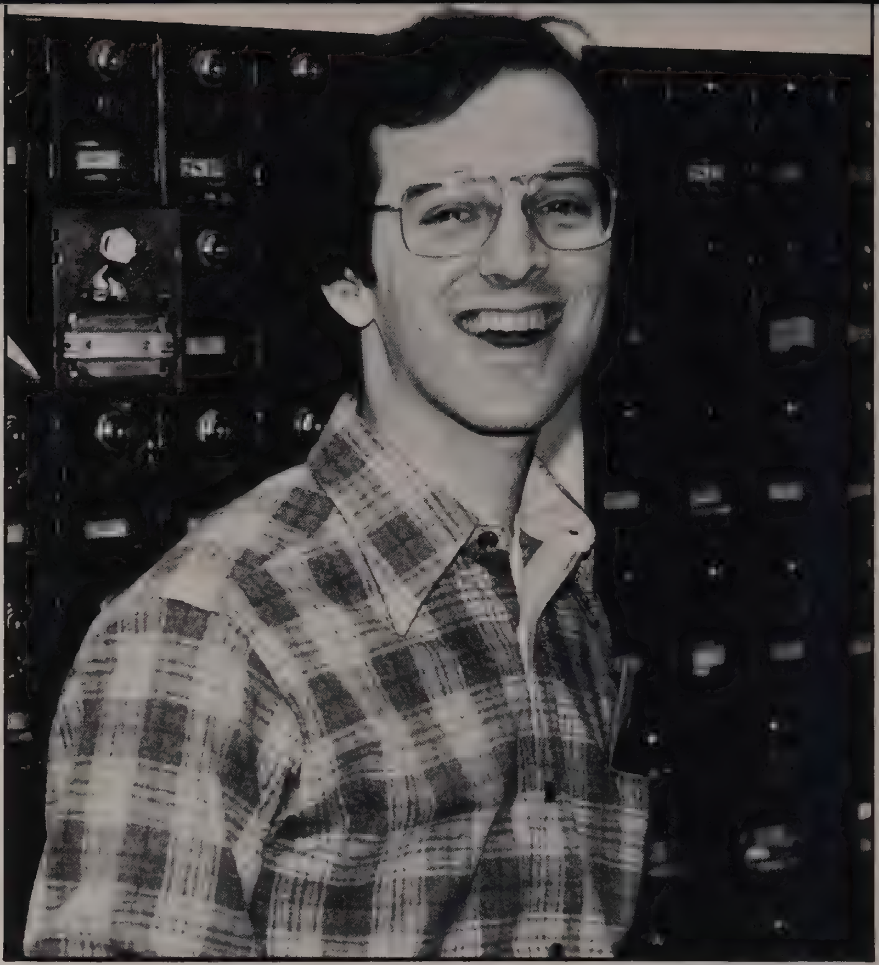


Warren Ervin
Stanford University
Seattle, Wash.
Pediatrics
Vanderbuilt Univ.

Nancy Fitch
Brown University
Shaker Heights, Ohio
Family Practice
Univ. Minn. Hosp.



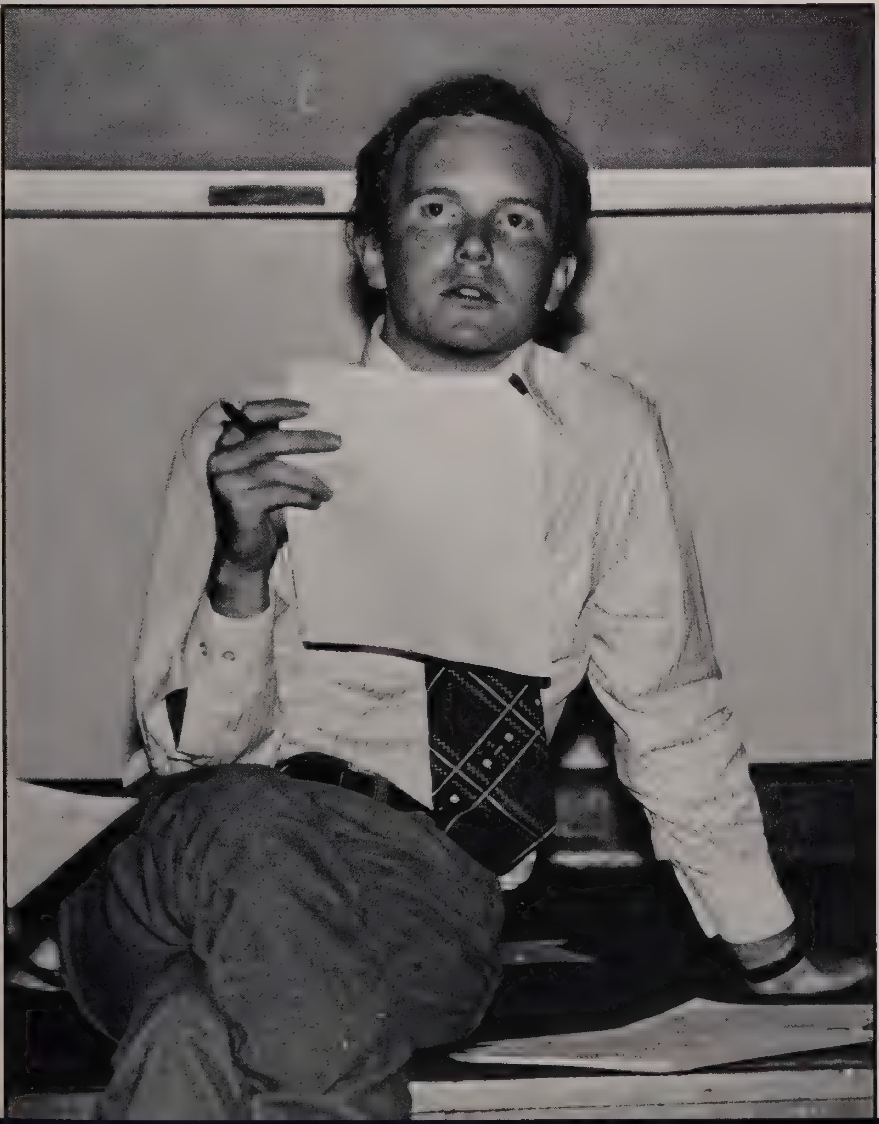
Paul Foster
Univ. of Mich.
Dearborn, Mich.
Internal Medicine
Duke Univ. Med. Center



Michael Neuss

Emily Yarbrough

Cindy Krause John Alexander



CLASS OF 1980

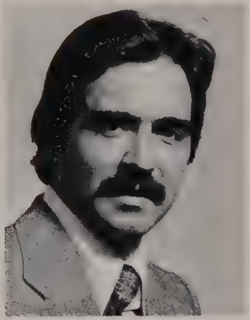
Joe W. Frazer, III
Duke University
Greensboro, N.C.
Surgery
U.C.L.A.

Lynn Froome
Bennington College
Penfield, N.Y.
Surgery
Rhode Island Hosp.

Jeffrey Giguere
Duke University
Wilmington, Del.
Internal Medicine
Vanderbuilt Univ.

Scott Gillogly
U.S. Military Acad.
E. Aurora, N.Y.
Surgery
Walter Reed Med. Cen.

Thomas B. Gore
Duke University
LaGrange, Georgia
Internal Medicine
Univ. of Virginia

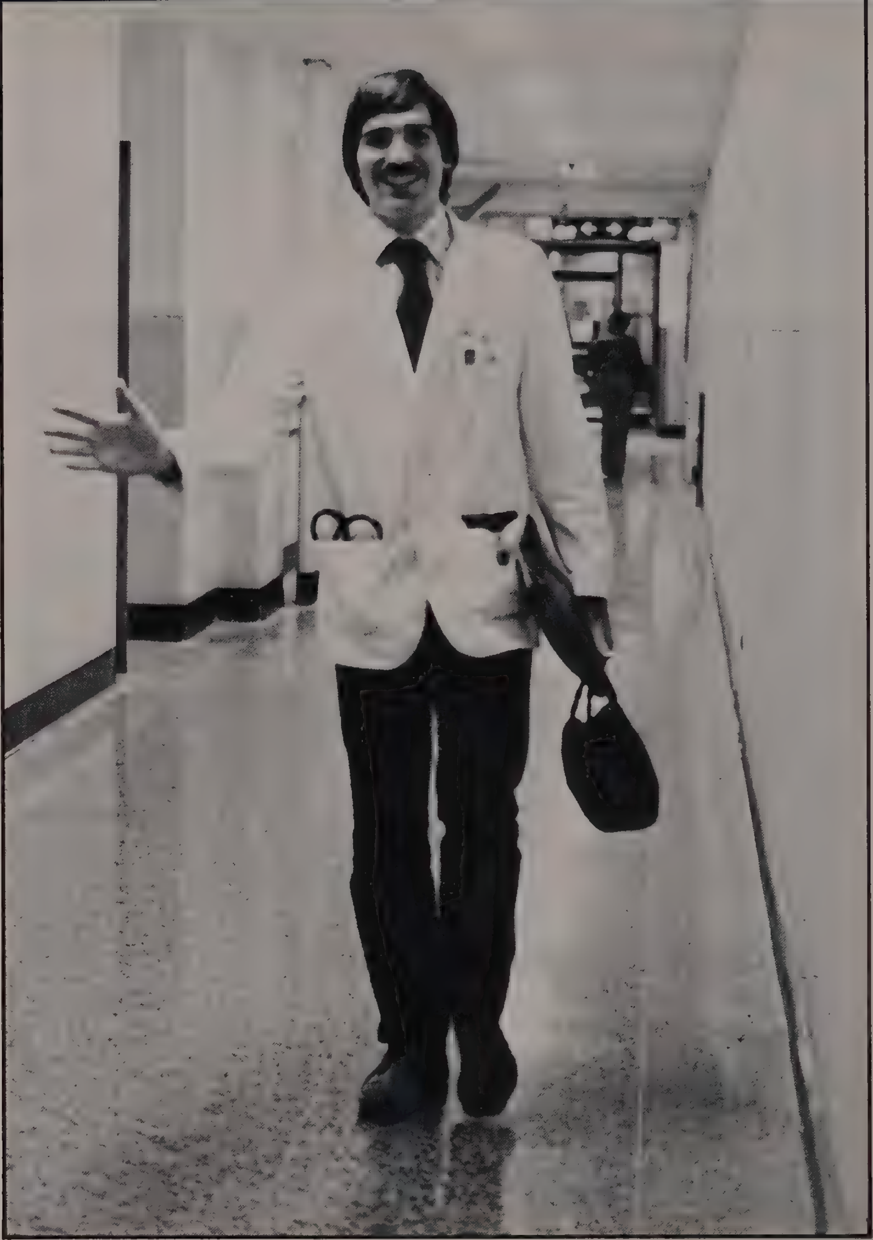


Paul F. Gores
Macalester College
Rochester, Minn.
Surgery
Univ. of Minn. Hosp.

Ronald Gottlieb
Univ. of Penn.
Englewood, N.J.
Internal Medicine
Jefferson University

James W. Grant
N.C. State Univ.
Rocky Mt., N.C.
Pediatrics
Duke Univ. Med. Center

CLASS OF 1980



Ralph Damiano

Leslie Brothers

Rebecca Willis

Janet Kinney, John Stringfield

Raymond Greenberg
U.N.C.-Chapel Hill
Chapel Hill, N.C.
Pediatrics
Boston Children's

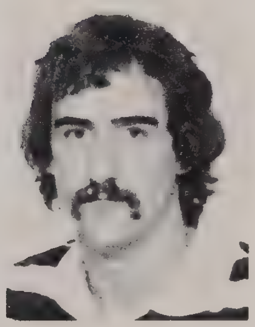
Kevin Hepler
Princeton University
Myerstown, Pa.
Family Practice
Univ. Missouri M.C.

Barbara H. Hodge
Duke University
Houston, Tx.
Pediatrics
N.C. Memorial Hosp.

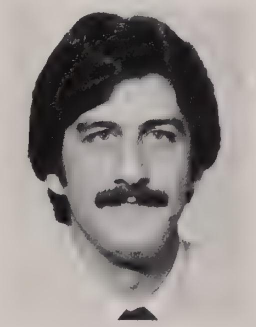
Reginald Ishman
Stanford University
Los Angeles, Calif.
Ophthalmology
Duke Univ. Med. Center

Richard King
U.N.C.-Chapel Hill
Gastonia, N.C.
Family Practice
Greenville Hospital

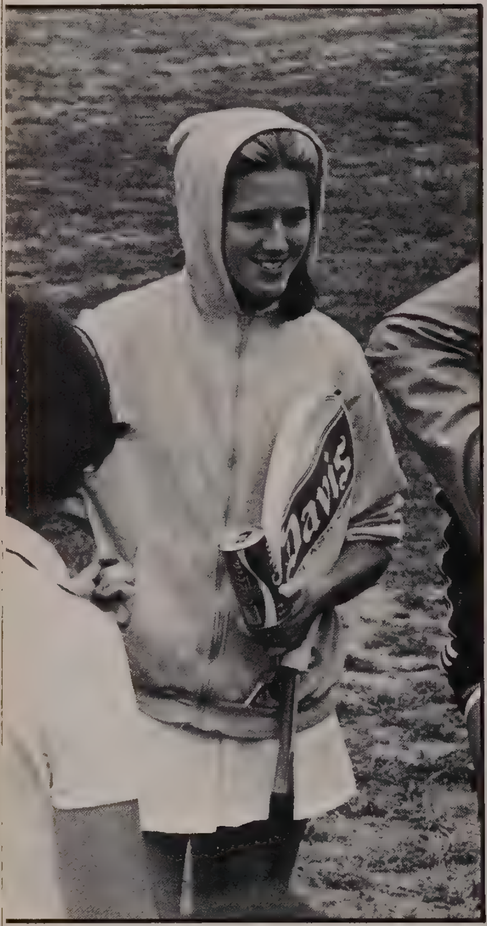
Janet S. Kinney
Duke University
Durham, N.C.
Pediatrics
Case Western Reserve



Kent H. Kistler
N.C. State Univ.
Raleigh, N.C.
Psychiatry
Washington Univ. Hosp.



Alan S. Klein
Brandeis Univ.
Brooklyn, N.Y.
Pediatrics
Univ. Calif.-S.D.



Mary Earley

CLASS OF 1980

Cynthia L. Krause
Univ. of Penn.
Baltimore, Md.
Internal Medicine
Balt. City Hosp.

Susan Lacks
Queens College
Flushing, N.Y.
Internal Medicine
G. Washington Univ.

James W. Larrick
Colorado College
Englewood, Colorado
Internal Medicine
Stanford University

James E. Lee
Duke University
Oak Park, Illinois
Psychiatry
Duke Univ. Med. Center

Okafor Lekwuwa
Duke University
Aba, Nigeria

Norma Celeste Lemon
Harvard-Radcliffe
Cincinnati, Ohio
Internal Medicine
Case Western Reserve

Cap B. Lessene
Princeton University
Gr. Pointe Farms, Mich.
Plastic Surgery
Stanford University

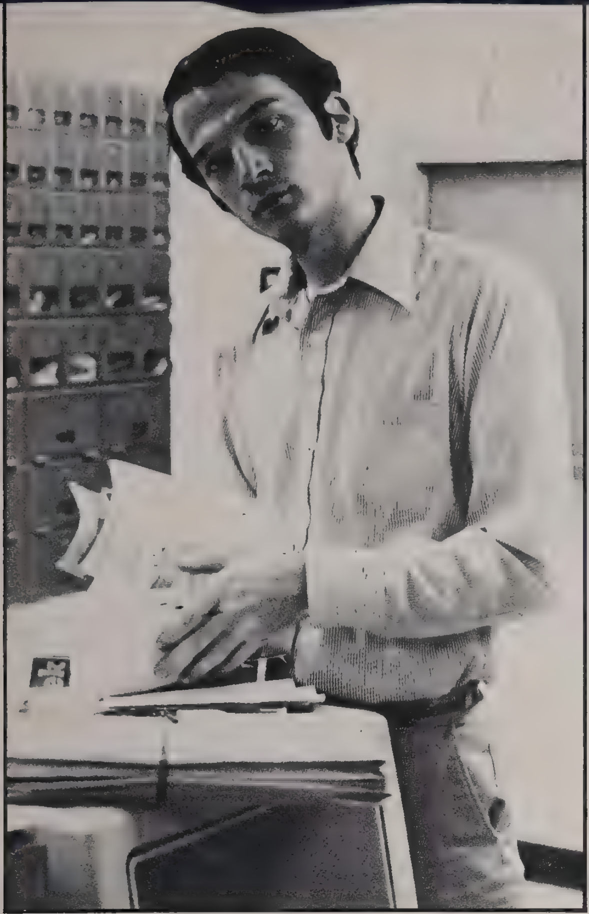
David Emil Ludlow
Brigham Young Univ.
Spanish Fork, Utah
Family Practice
Univ. Oregon

Michael E. Mabry
Duke University
Lexington, Ken.
Internal Medicine
Univ. Alabama M.C.

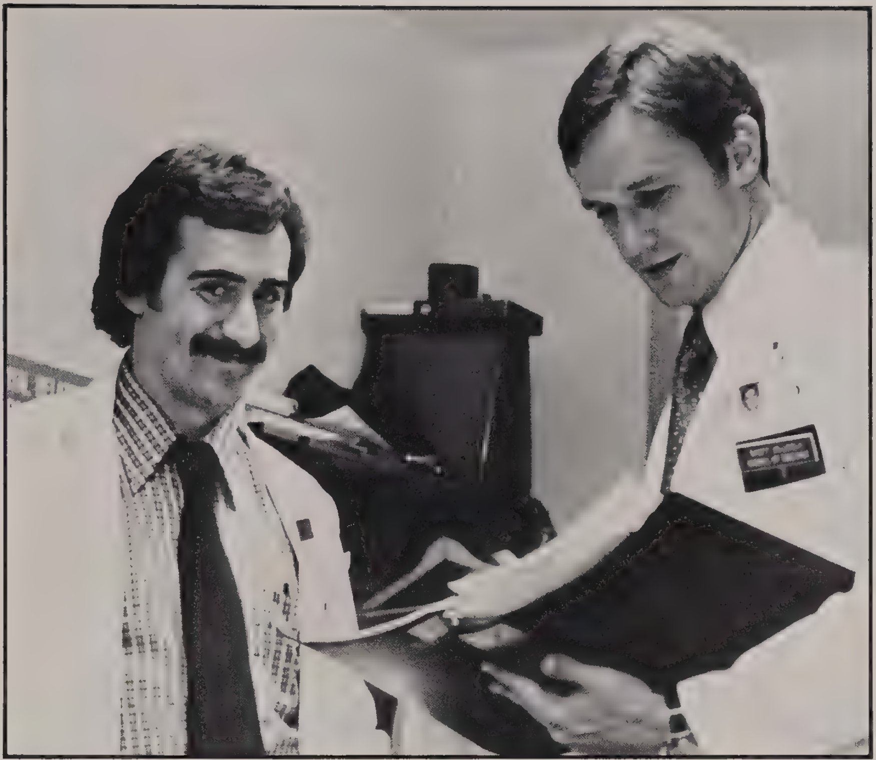
Jaquelyn Jo Maher
Duke University
St. Louis, Missouri
Internal Medicine
Duke Univ. Med. Center

F. Gregory Mappin
Duke University
St. Simons Is., Ga.
Surgery
Univ. of Virginia

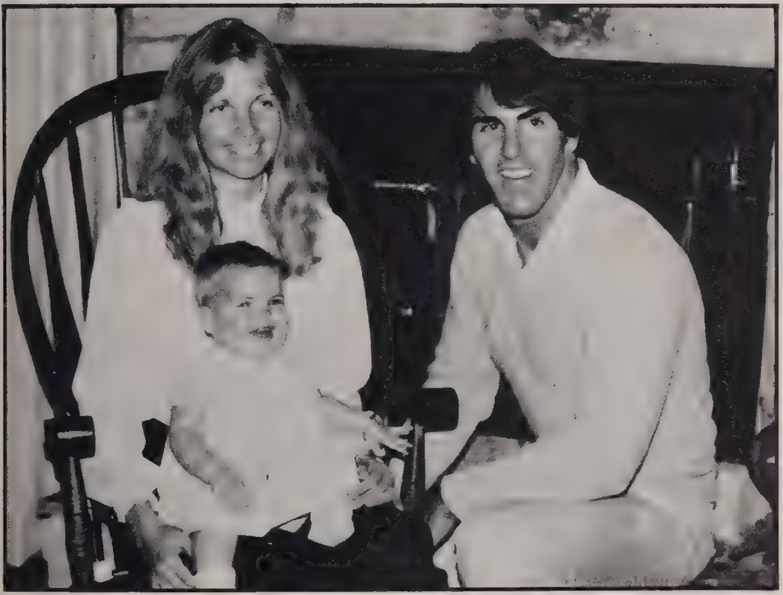
Daniel E. Mason
Colgate University
Beechhurst, N.Y.
Pediatrics
M.C. Hosp. Vermont



Steve Ryan



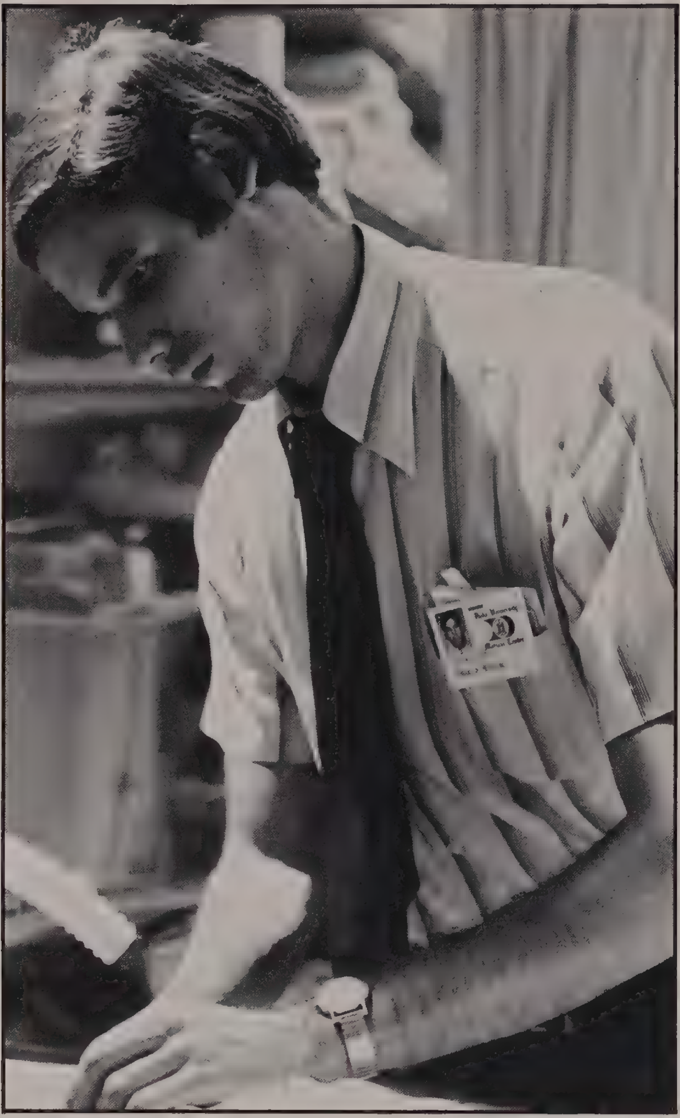
Kent Kistler and Scott Gillogly



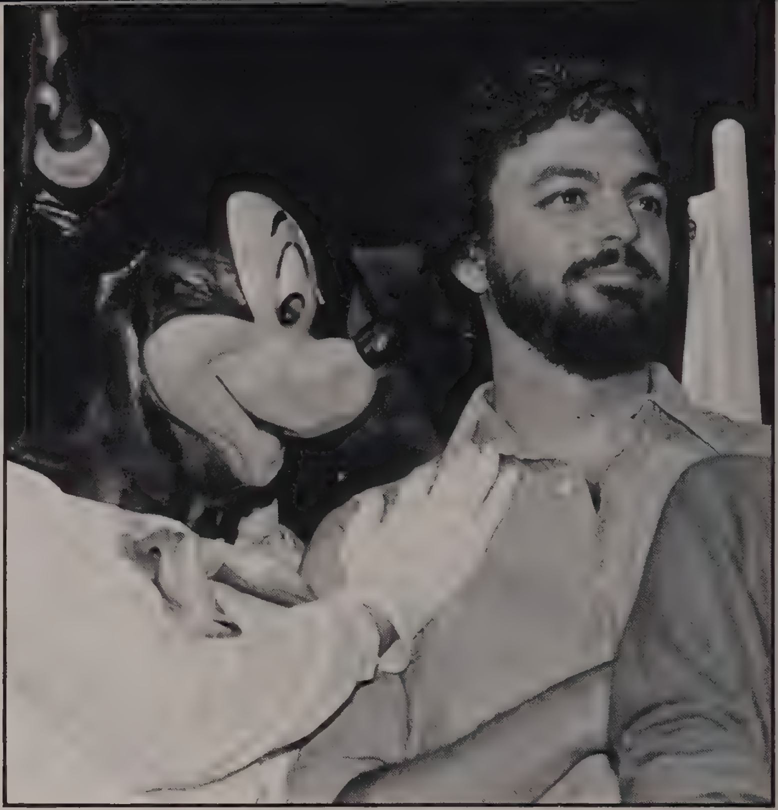
Drs. Ellen and Joel Puleo and Ashley

Mike Mabry, Allen Roses, M.D.

Steve Wool, Peggy Parker

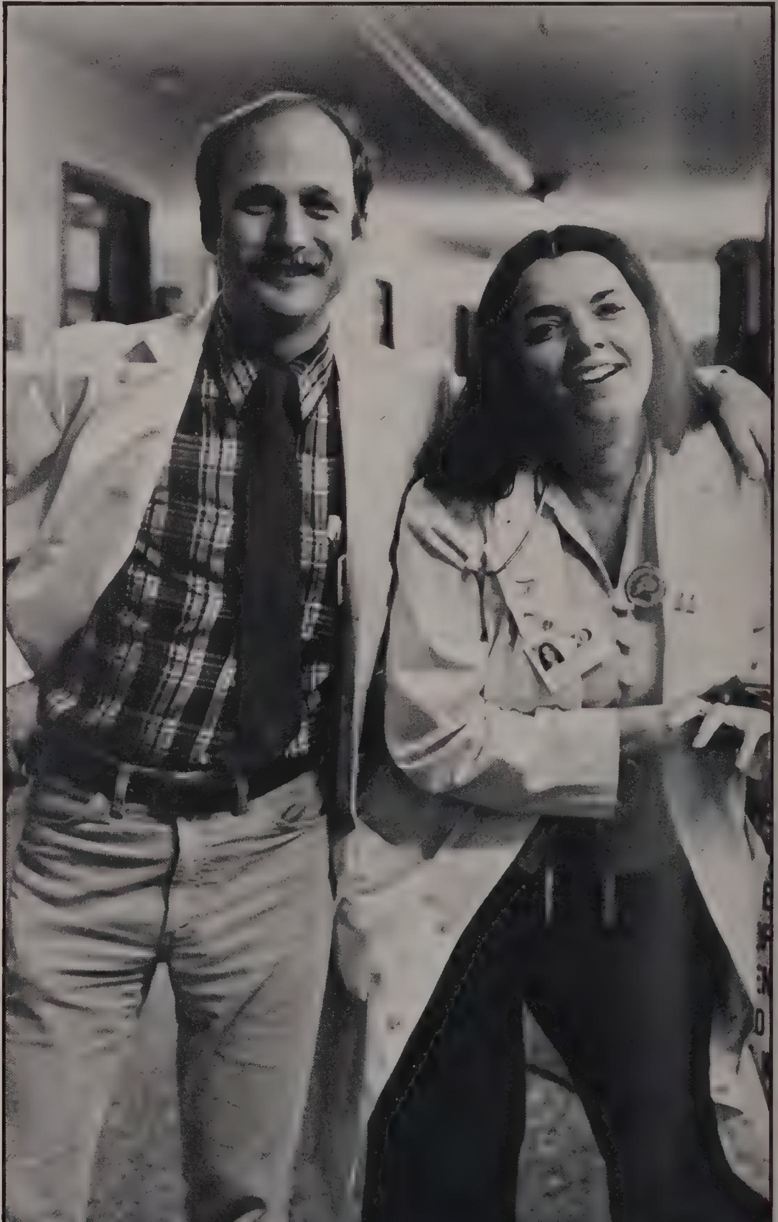


Paul Foster



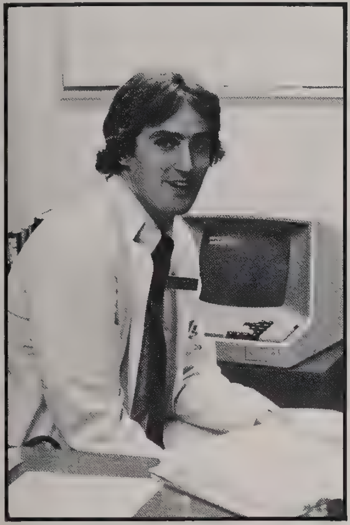
Mickey Mouse, Mike Rocco

Mary Earley

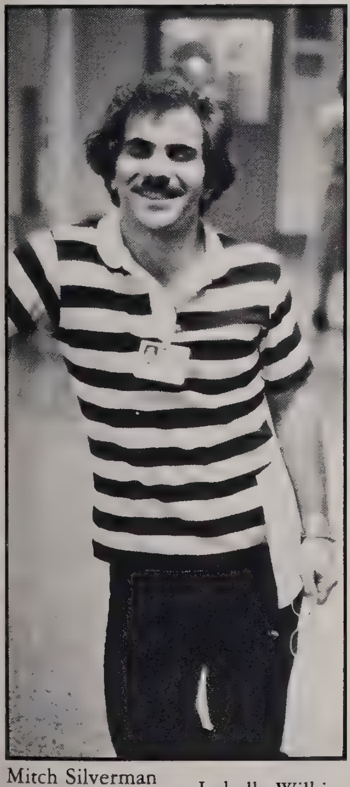


John Buckner, Roberta Gray, M.D.

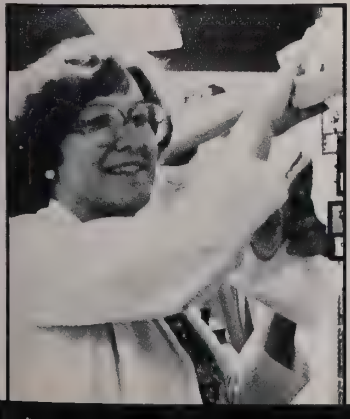
Mike Rocco



Chris Chambers

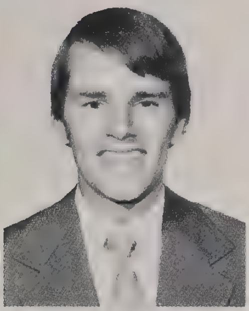


Mitch Silverman



Isabelle Wilkins

CLASS OF 1980

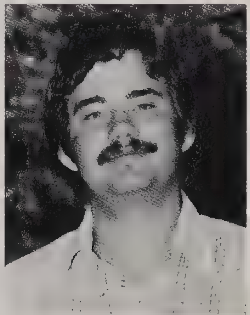


Dale A. Matthews
Princeton University
Hanover, N.H.
Internal Medicine
Univ. Conn. Hosp.

Gwen Mazoujian
Skidmore College
Tenafly, N.J.
Pathology
Peter Bent Brigham

Richard G. Michal
U.N.C.-Chapel Hill
Charlotte, N.C.
Family Practice
Riverside Hosp.

Gregory Morrison
Princeton University
Westfield, N.J.
Surgery
Case Western Reserve



C. Bruce Murdock
Univ. S. Carolina
Anderson, S.C.
Internal Medicine
Med. College Georgia

Michael Neuss
Univ. of Michigan
Indianapolis, Ind.
Internal Medicine
Duke Univ. Med. Center

Chalmers Nunn, Jr.
Duke University
Clarksville, Va.
Internal Medicine
Duke Univ. Med. Center

Margaret Parker
Duke University
Sarasoto, Florida
Pediatrics
Univ. Missouri M.C.

Mary L. Peacock
U.N.C.-Greensboro
Greensboro, N.C.
Behavioral Medicine
Univ. of Virginia

L. Elizabeth Peterson
Wellesley College
Charlotte, N.C.
Internal Medicine
Case Western Reserve

Stephen E. Post
U.N.C.-Chapel Hill
Falls Church, Va.
Flexible
U.S. Public He. Service

Joel G. Puleo
Duke University
Elma, N.Y.
Ob-Gyn
Duke Univ. Med. Center

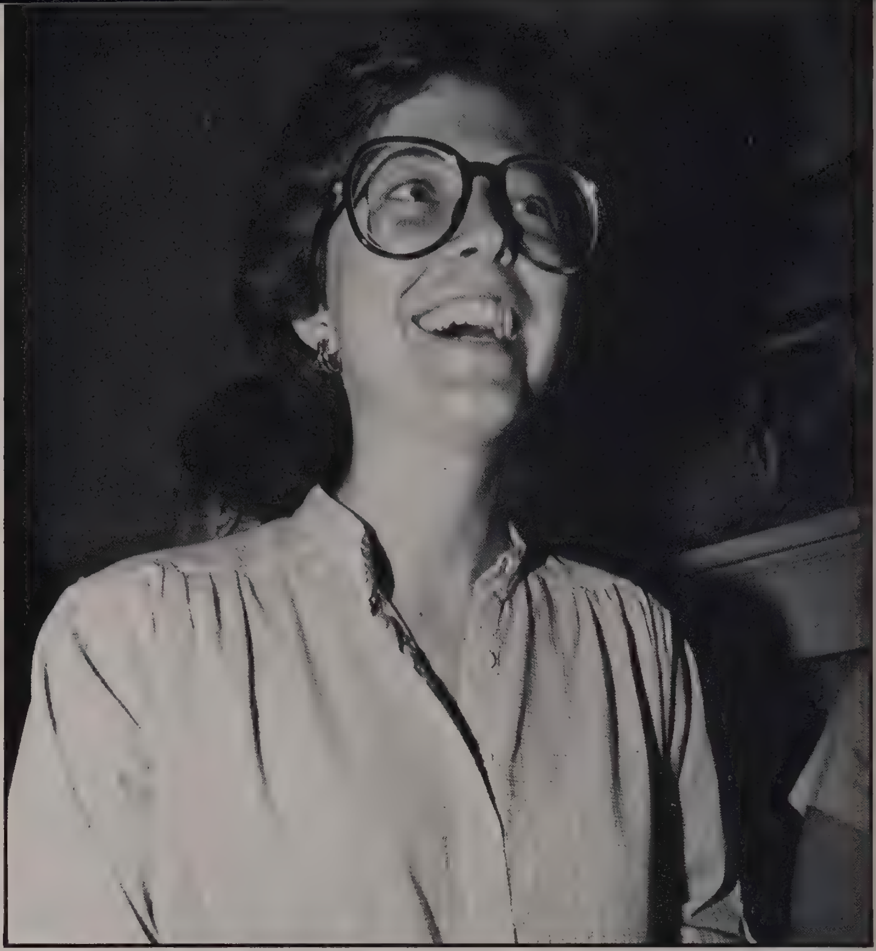
Michael Rocco
Georgetown Univ.
W. Orange, N.J.
Internal Medicine
Peter Bent Brigham

Gary J. Roloson
Univ. Calif.-S.D.
San Gabriel, Calif.
Pathology
Univ. Calif.-S.D.

Dana Rosenberg
Brown University
Cliffside Park, N.J.
Pediatrics
Stanford University

John Ross-Duggan
Univ. Calif.-Irvine
New Port Beach, Calif.
Radiology
Univ. Calif.-Irvine

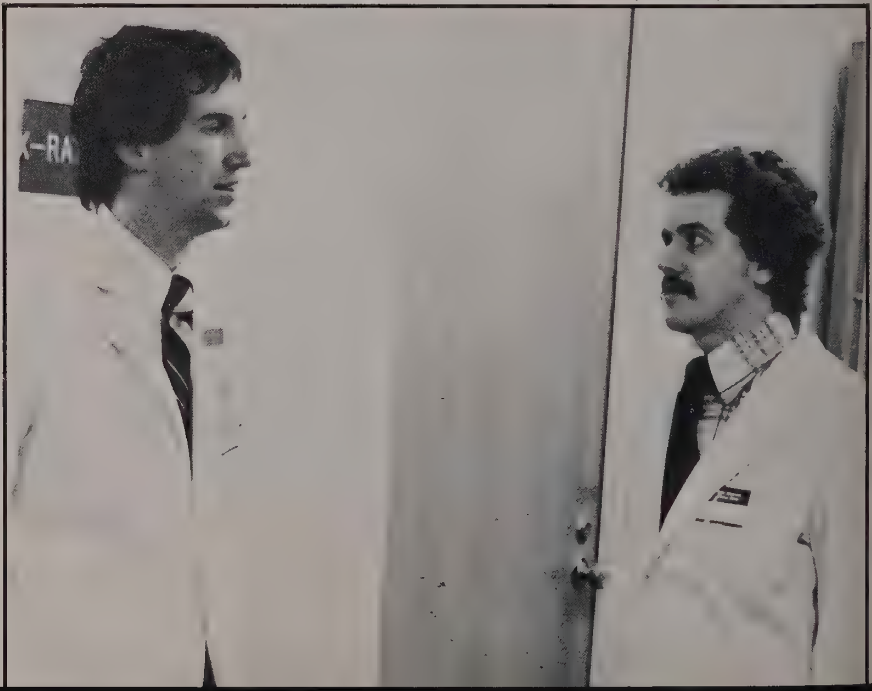
CLASS OF 1980



Jackie Maher

Isabelle Wilkins, Manuel Aguilar

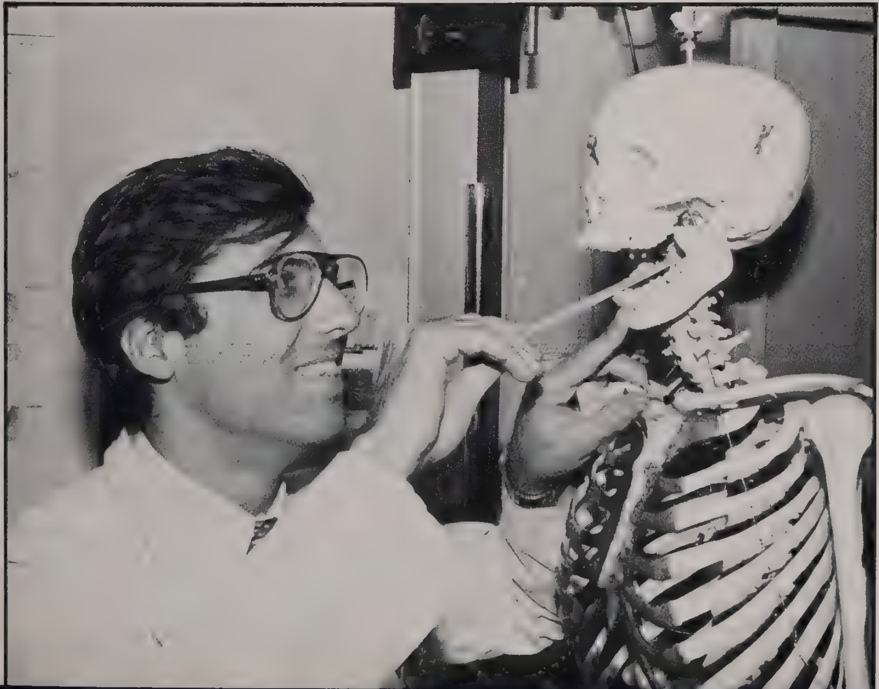
Hadley Wilson, Rob van Dalen



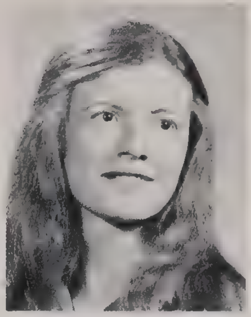
Jon Tumen

Rich Ward

Allan Crimm

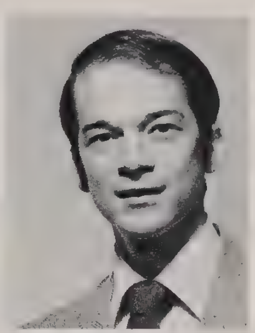


Michael Rotberg
Haverford College
W. Orange, N.J.
Neurology
Med. Center Penn.



Janet Russell
Duke University
Mickleton, N.J.
Family Practice
Duke Univ. Med. Center

John Rutledge, II
SW Univ. Memphis
Humblodt, Tenn.
Internal Medicine
Massachusetts General

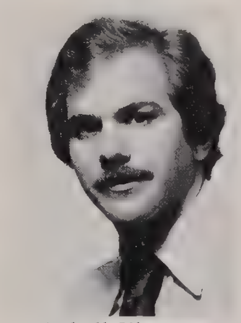


Stephen G. Ryan
Georgetown Univ.
Kensington, Md.
Pediatrics
Duke Univ. Med. Center

Carolyn Salafia
Dartmouth College
Middletown, Conn.
Pediatrics
St. Louis Children's

Elizabeth Schreiner
Renselaer Polyt. Inst.
Hinckley, Ohio
Flexible
Salt Lake City, Utah

Randale Sechrest
U.N.C.-Chapel Hill
Jamestown, N.C.
Flexible
Univ. Virginia M.C.



Mitchell Silverman
Harvard College
Massapequa, N.Y.
Internal Medicine
Grady Mem. Hospital

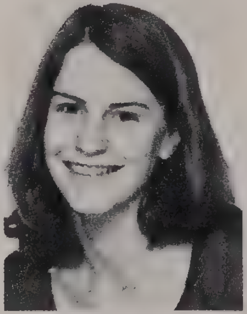
Peter J. Sims
Amherst College
New Rochelle, N.Y.
Pathology
Univ. Virginia

Stephanie Smith
Univ. S. Carolina
Columbia, S.C.
Internal Medicine
Med. Cent. Hosp. S.C.

Douglas Sprung
New York University
New York City, N.Y.
Internal Medicine
Duke Univ. Med. Center

John Stringfield
U.N.C.-Chapel Hill
Hazelwood, N.C.
Family Practice
T. Jefferson Univ.

Chris Teigland
Duke University
Miami Shores, Fla.
Surgery
Univ. Utah Hosp.



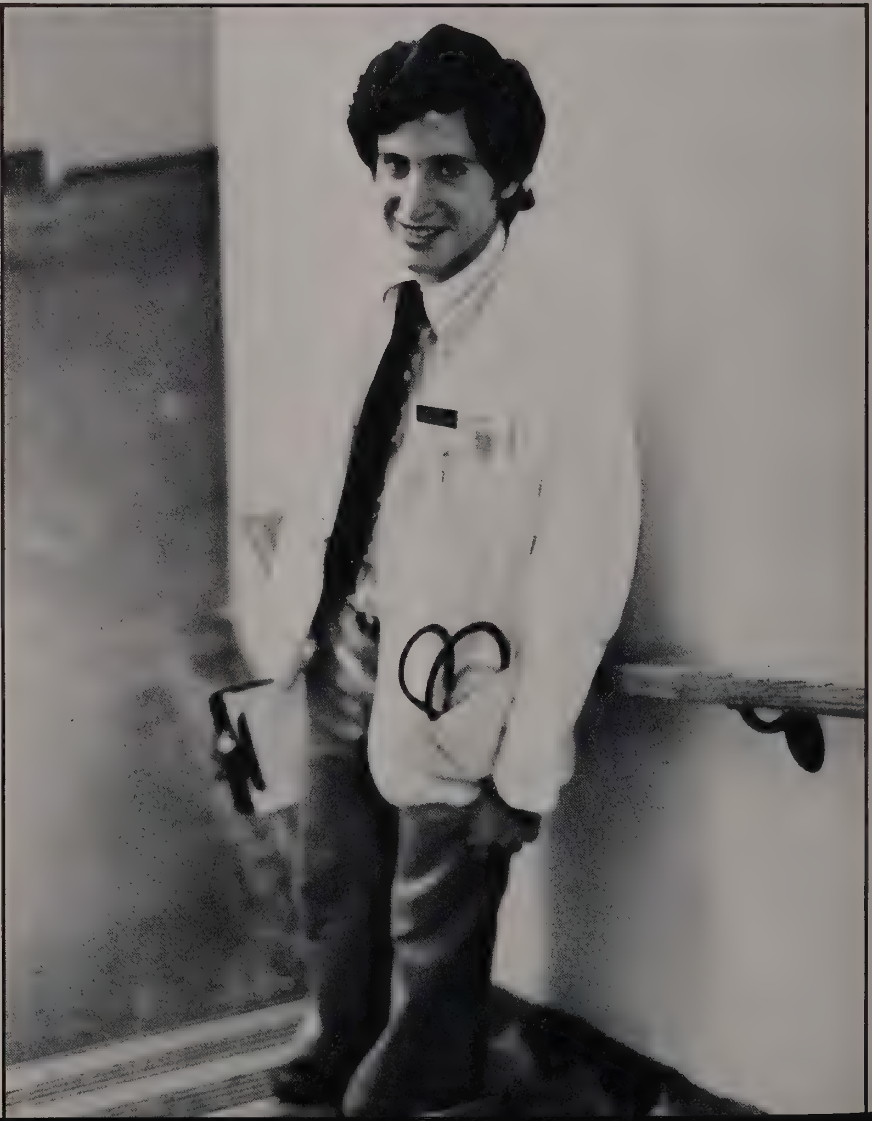
Lillian M. Teigland
Swarthmore College
Charlotte, N.C.
Family Practice
Univ. Utah Hosp.

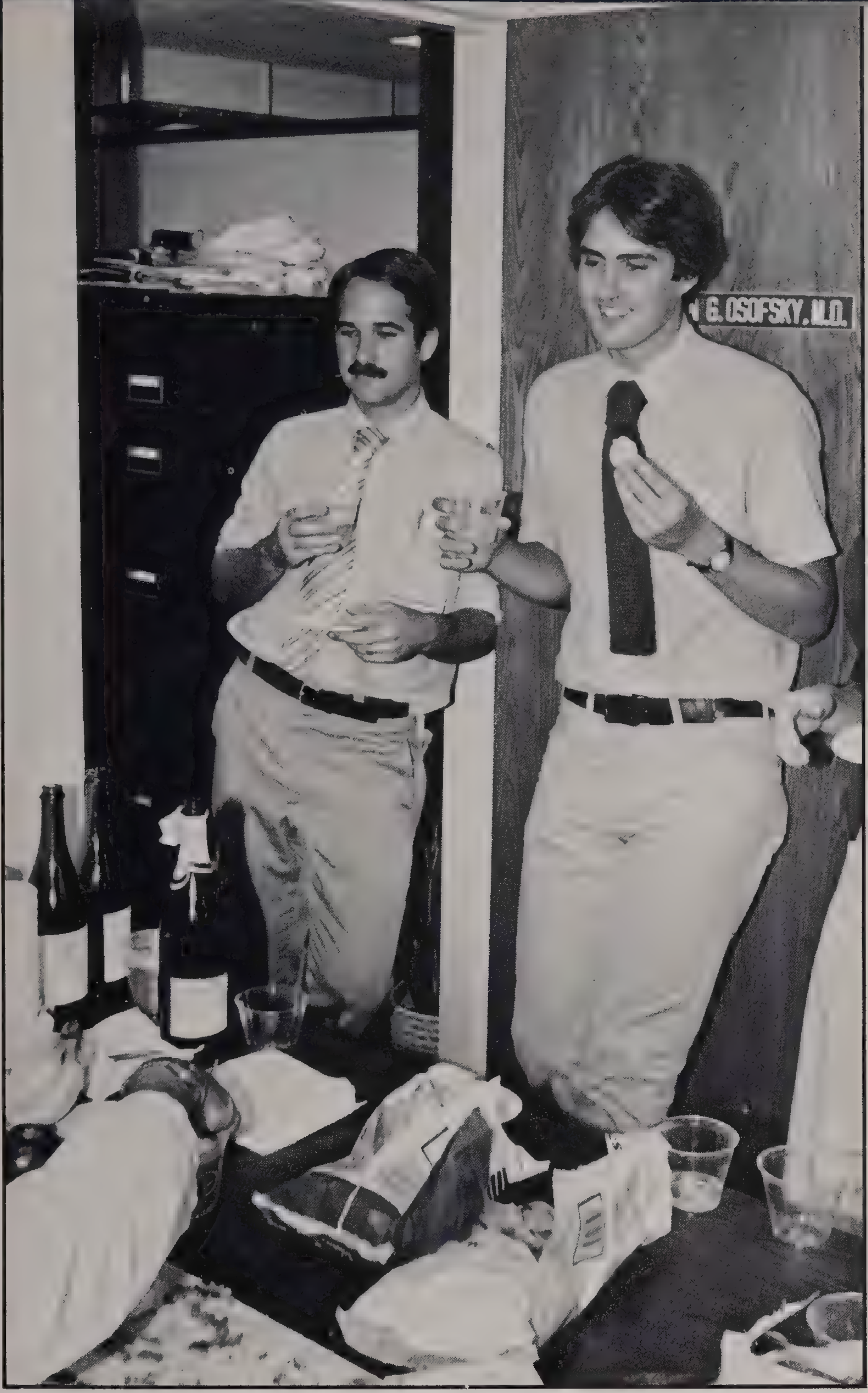
Katherine Thompson
Duke University
Lexington, Kentucky
Internal Medicine
Vanderbuilt Univ.

Kim Tibbetts
Stanford University
Granada Hills, Calif.
Anesthesia
Univ. Calif.-S.F.

Sandy, Bill Bunn

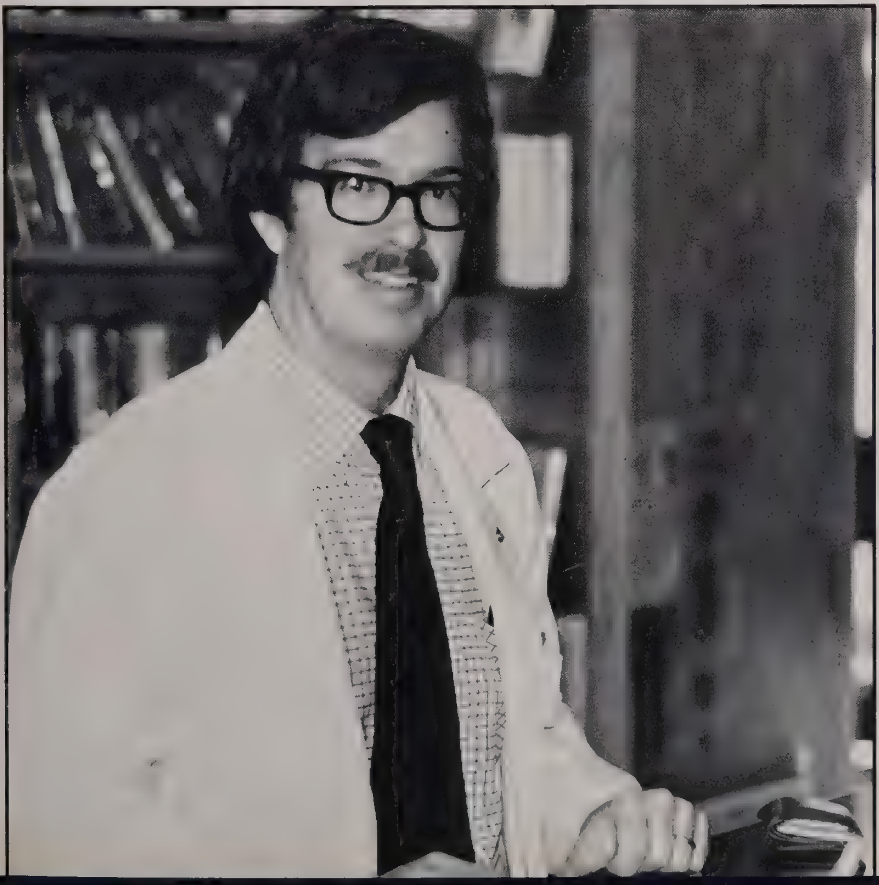
Mitch Dunn




G. OSOFSKY, M.D.

Billy Andrews, Chris Chambers

Bob Ziegler



CLASS OF 1980

Alan Tipermas
Mass. Inst. Tech.
Fair Lawn, N.J.
Surgery
New York Hospital

Alan Treiman
Franklin and Marshall
Merrick, N.Y.
Surgery
New York Hospital

Jon Jay Tumen
Brandeis University
Deal Park, N.J.
Internal Medicine
Vanderbuilt University

Robert Van Dalen
Duke University
Clifton, N.J.
Ob-Gyn
Duke Univ. Med. Center

CLASS OF 1980

Hans Vogel
U.N.C.-Chapel Hill
Durham, N.C.
Pathology
Univ. Arizona Hosp.

Richard Ward
Duke University
Charlotte, N.C.
Pathology
N.C. Memorial Hosp.

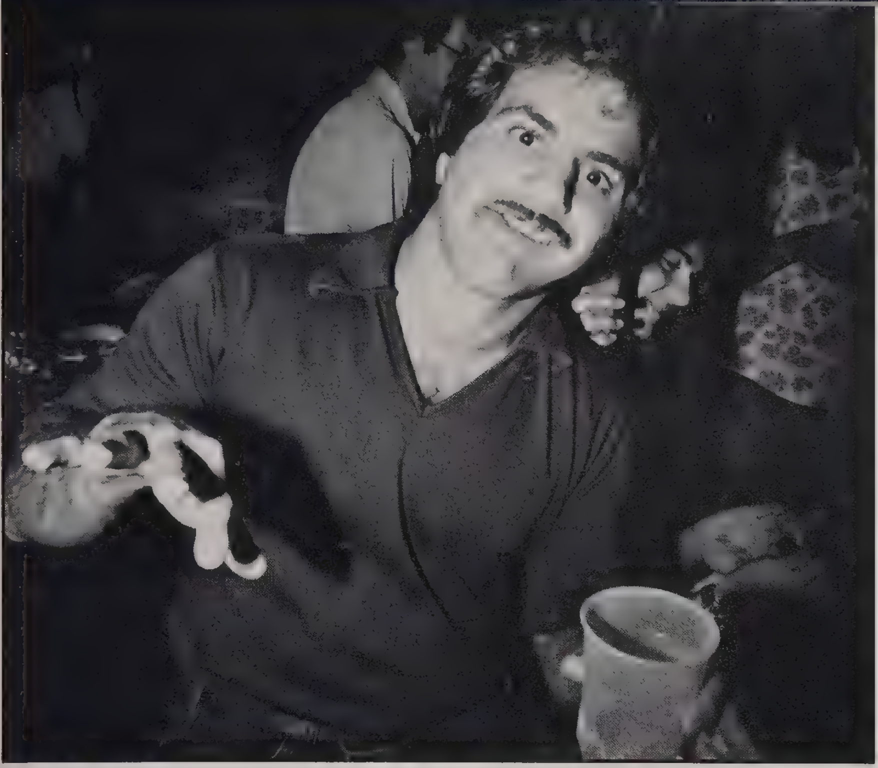
Ronald Washburn
Brown University
Lake Bluff, Illinois
Internal Medicine
Duke Univ. Med. Center

Mark Weissig
Univ. Calif.-Davis
Sacramento, Calif.
Internal Medicine
Duke Univ. Med. Center

Giles Whalen, David Howell

Reggie Ishman

Chal Nunn

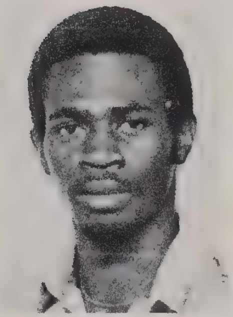

Mitch Silverman

Mike Rocco, Billy Andrews

Stephanie Smith, Barbara Clark

Giles Whalen
Harvard College
Shrewsbury, N.J.
Surgery
New York Hospital

Ralph Whatley
Duke University
Raleigh, N.C.
Internal Medicine
Univ. Tx.-Houston


Johnny White, Jr.
Harvard College
Virginia Beach, Va.
Surgery
Univ. Tx.-Houston

Thomas White
Duke University
Cherryville, N.C.
Family Practice
Charlotte Mem. Hosp.

Isabelle Wilkins
Barnard College
Pittsburgh, Pa.
Ob-Gyn
Mt. Sinai Hospital

Christopher Williams
Univ. Fla.-Gainsville
Englewood, Fla.
Flexible
U.S. Public Health Ser.

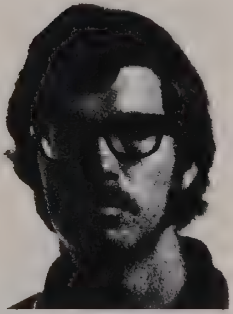
Rebecca Willis
Yale University
Perry, Iowa
Ophthalmology
Univ. Iowa Hospitals

Bryan Hadley Wilson
Davidson College
Boone, N.C.
Internal Medicine
Vanderbuilt University

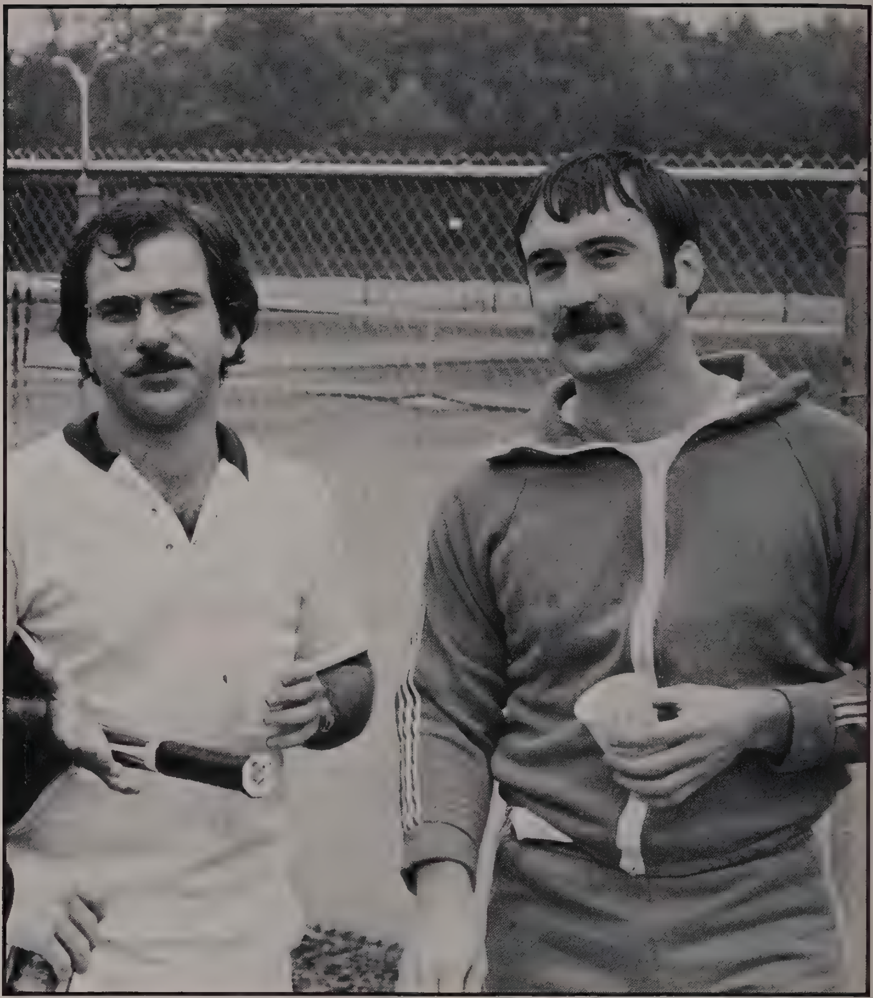
CLASS OF 1980

Steven Wool
Washington University
Waukegan, Illinois
Family Practice
Univ. Arizona

Emily Yarbrough
Duke University
Durham, N.C.
Family Practice
Med. Cent. Hosp. S.C.



Robert Ziegler
Univ. of Colorado
College Park, Georgia
Internal Medicine
Barnes Hospital

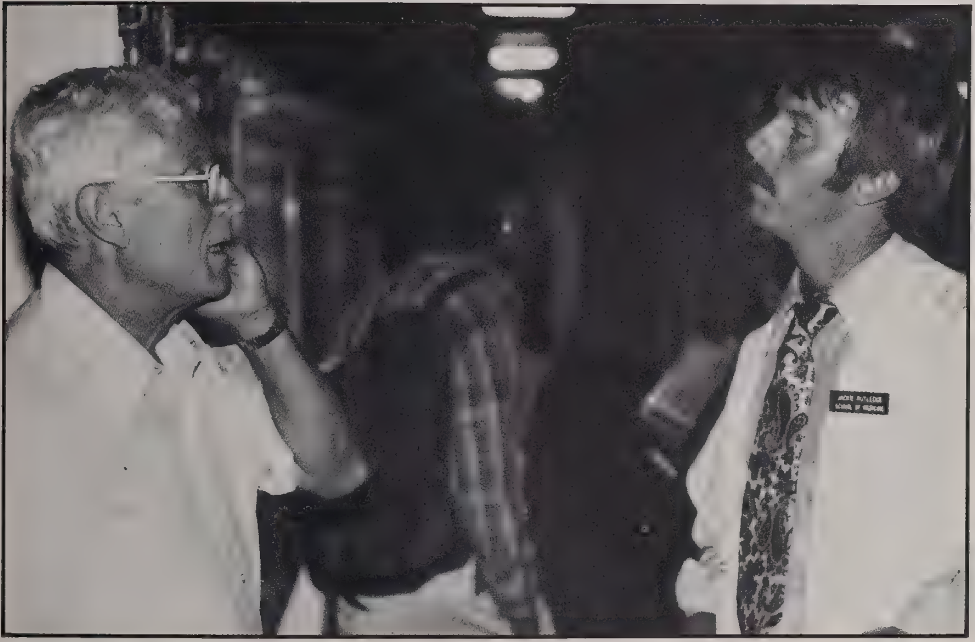


Mitch Silverman, Mike Mabry

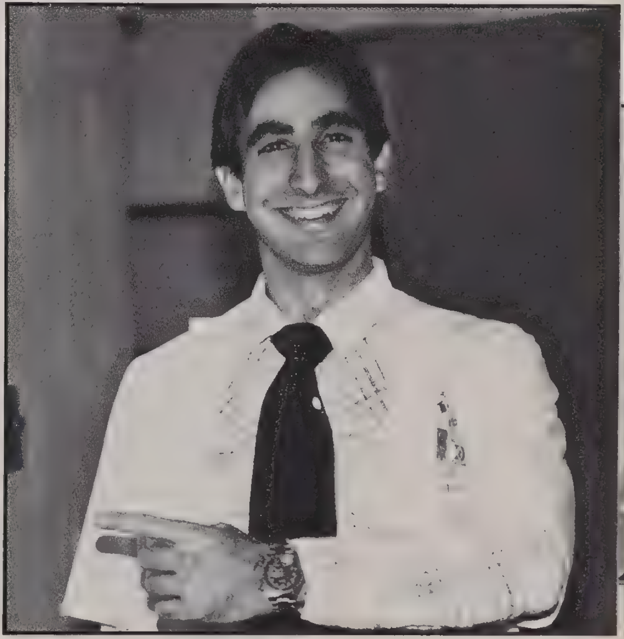
Barbara Basuk

Kathy Thompson

Charles Beasley



Jay Arena, M.D., Jackie Rutledge



Dan Mason

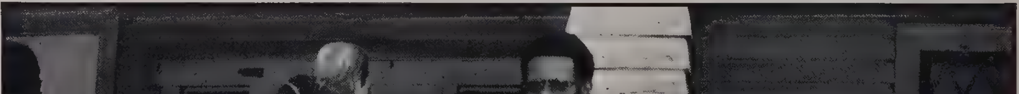
Ron Washburn

Gerald Lourie, Ron Gottlieb

CLASS OF 1980

William J. Doyle

MANY THANKS TO OUR PHOTOGRAPHERS . . .
. . . Mitch Silverman
. . . Bruce Murdock and
. . . Steve Denning



Clockwise from bottom left: Jane Weideli, Betty Goldberg, Lisa Lattal, Carnell Cooper, Linda Woodard, and Nancy Fitch.

CLASS OF 1981

Dave Albert Renata Albrecht Dave Allen Pam Allen Roger Anderson Marcia Angle Gwen Arens Gloria Ashland Steve Barnes Faith Birmingham Dave Brakey Craig Bloch Pam Bowe Bruce Brasher Febe Brazeal Pete Bressler Gene Broadhead Pete Bronec

Phil Buescher Dick Calvert Rob Campbell John Christenbury Deb Clapp Tim Clark Carnell Cooper Diane Davidson Chip Davis Jeff Davis John Davis John Dein Pete DeLuca Nanny Dunlap Laurie Dunn Berilyn Ferguson Larry Floyd Ed Fudman

Joe Germino Matt Gillman Candice Grace Mark Haas Dave Harlan Greg Hudson Mike Johnson Verana Jorgensen Jeff Kappa Steve Keener Eddie Koo John Kreit Jean Kunin JoAnn Lang Ann Lansing Ken Lazarus

Tommy Lee JoAnn Leone Cap Lesesne Mark Ling Gilda Lorensen John Lucas Ann McKnight Greg Mencio Tom Michel Bill Middleton Dave Milbauer Nancy Milliken Demetria Montgomery Randall Moreadith Hugh Morris Jim Morris John Morrison

Beth Murdaugh Kathy Ney Jim O'Neill Bob Parkerson Brian Peters JoAnn Piscitelli Jan Porter Claire Poyet Will Pryor Bill Putnam Jim Ramage Brandon Rankin Eric Reiman Ken Riley Asela Russell Steve Schiff Steve Schwartz Jim Segars

Lea Sewell Pam Sholar Earl Shugerman Dan Siedler Dave Simel Quay Snyder Jeff Sourbeer Barb Spector Frank Spence Ted Stanley Roy Stein Chad Stephens Stuart Stowers Sam Thielman Margo Thienemann Dave Trader Bill Tyor Tony vanden Berg

Jim Walsh Pat Watkis Bruce Watson Bob Whitehurst Bernie Wilcosky Mont Wooten

CLASS OF 1981

David E. Albert
Harvard
McAlester, OK

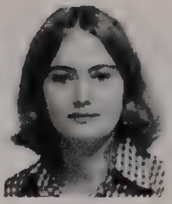
Renata Albrecht
Yale
Rockville, MD

David B. Allen
Stanford
LaGrange, IL

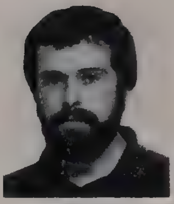
Roger F. Anderson
Duke
Durham, NC

Marcia Angle
Harvard
Omaha, NB

Gwen Arens
Duke
Silver Spring, MD

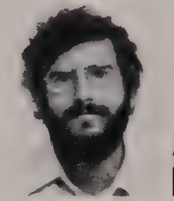

Gloria E. Ashland
Yale
North East, MD

Ralph P. Baker
Duke
Newberry, SC


Steve Barnes
Auburn
Greenville, NC

Faith Birmingham
N.C. State
Durham, NC

David N. Blakey
N.C. State
Greensboro, NC


Craig Bloch
Tufts
Allenton, PA

Pam Bowe
Wellesley
Cincinnati, OH

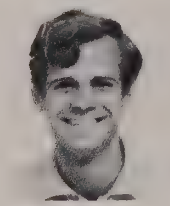
Bruce Brasher
Duke
Basking Ridge, NJ

Febe Brazeal
Birmingham-S'thrn
Fairhope, AL

Peter Bressler
Hamilton
Durham, NC

Peter Bronec
Stanford
Racine, WI

Phil Buescher
Duke
Ft Washington, PA


Dick Calvert
Duke
Worthington, OH

Rob Campbell
Northwestern
Oak Ridge, TN

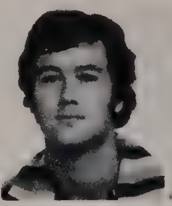
J. Christenbury
Oral Roberts
Charlotte, NC

Debra H. Clapp
Univ. of Virginia
Bluefield, WV

Tim J. Clark
Colby
Winston-Salem, NC

Tyler Jay Curiel
Univ. of Georgia
Douglasville, GA

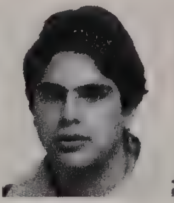
Diane M. Davidson
Yale
Monroe, NY


Chip B. Davis
Duke
Orlando, FL

Jeff U. Davis
Wake Forest
Winston-Salem, NC

John S. Davis
Univ. of Akron
Akron, OH

John R. Dein
Duke
San Antonio, TX


Peter A. DeLuca
St. Peters
Jersey City, NJ

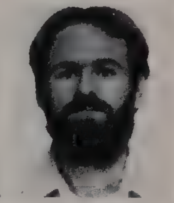
Nancy E. Dunlap
Wellesley
Gainesville, GA

Laurie L. Dunn
Davidson
Laurinburg, NC

Berrylin Ferguson
Princeton
Jacksonville, FL

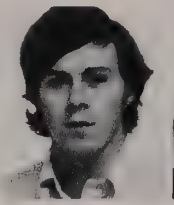
Larry Floyd, Jr.
Vanderbilt
Durham, NC

Edward J. Fudman
Duke
Baltimore, MD


Matthew Gillman
Harvard
Chevy Chase, MD

Candis D. Grace
S.C. St. Coll.
Charleston, SC

David M. Harlan
Michigan
Sylvania, OH

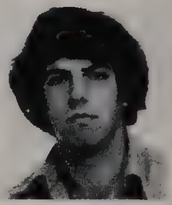

Greg L. Hudson
Brown
Wellesley, MA

Verena Jorgensen
Stanford
Garden City, NY

Jeff R. Kappa
Duke
Kingsport, TN

Stephen R. Keener
Davidson
Swannanoa, NC

Edward H. M. Koo
Amherst
Hong Kong


John W. Kreit
Duke
Hebron, MD

Jean E. Kunin
Wisconsin
Madison, WI

Joanne Lang
Wisconsin
Milwaukee, WI

Ann M. Lansing
Duke
Durham, NC

J. Tommy Lee III
Davidson
Wilmington, NC

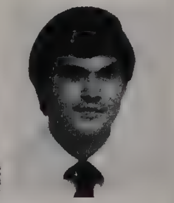
Joann C. Leone
Williams College
Pelham, NY

Cap B. Lesesne
Princeton
Grosse Pointe, MI

Gilda J. Lorensen
Stanford
Orinda, CA

S. Chace Lottich
Duke
Atlanta, GA

Gerald L. Lourie
Brown
Syracuse, NY


John F. Lucas III
Ole Miss
Greenwood, MS

Class of 1981

Anne McKnight
UNC-Chapel Hill
Charlotte, NC

Greg A. Mencio
Duke
Naugatuck, CT

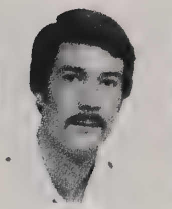
Bill D. Middleton
Duke
Muncie, IN

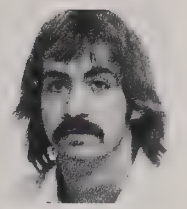
David L. Milbauer
SUNY-Buffalo
Massapequa, NY

Eddie Miller
Colgate
Columbus, OH

Nancy Milliken
Harvard
Spartanburg, SC

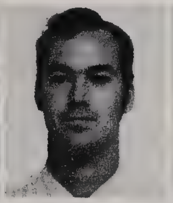
D. Montgomery
Clark College
Ashville, AL


Hugh B. Morris
Duke
Aiken, SC


Jim Morris
Dartmouth
Durham, NC

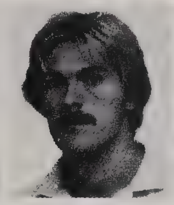
John G. Morrison
Erskine
Due West, SC

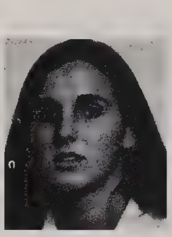
Beth Murdaugh
Brown
Columbia, SC

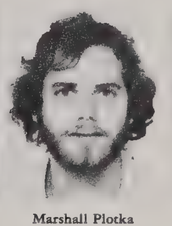

Jim F. O'Neill
Colorado
St. Petersburg, FL

Rich Olson
Minnesota
Canby, MN

Bob Parkerson
Duke
Durham, NC


Bryan M. Peters
UNC-Chapel Hill
Elizabeth City, NC


Joanne Piscitelli
Occidental Coll.
Arcadia, CA


Marshall Plotka
Duke
Mt. Brook, AL

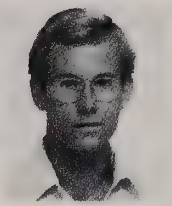
Jan L. Porter
Connecticut
Memphis, TN

Claire M. Poyet
Duke
Coral Gables, FL

William W. Pryor
Furman
Simpsonville, SC

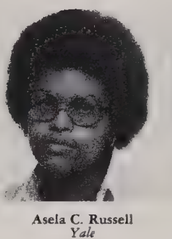
Bill S. Putnam
Duke
Roanoke, VA

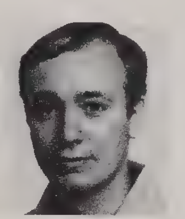
Jim E. Ramage
Stanford
Columbia, SC


Brandon Rankin
Davidson
Concord, NC

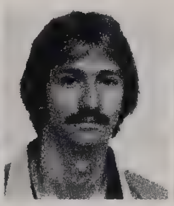
Eric M. Reiman
Duke
Ft. Washington, NY

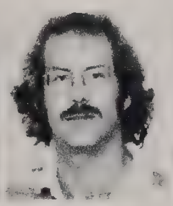
Ken Riley
Stanford
Oakland, CA


Asela C. Russell
Yale
Washington, DC


Steve J. Schiff
M.I.T.
Liberty, NY

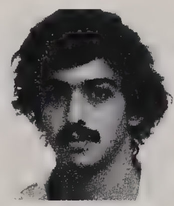
Steve W. Schwartz
Duke
Newport News, VA


Jim H. Segars
Duke
Lenoir, NC

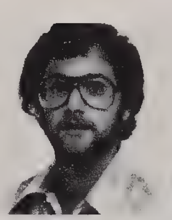

Harry Severance
East Carolina
Wilson, NC

K. Lea Sewell
Dartmouth
Middleburgh, NY

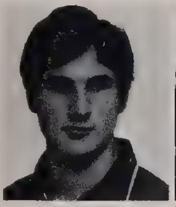
Pam W. Sholar
Agnes Scott
Mooresville, NC

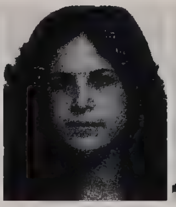

Earle Shugerman
Hampshire College
Birmingham, AL

Daniel E. Siedler
Dartmouth
West Falls, NY


David L. Simel
UNC-Chapel Hill
Greensboro, NC

Quay Snyder, Jr.
U.S.A.F. Academy
Carlisle Bar'k, PA

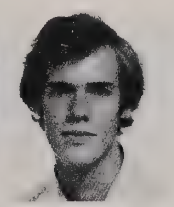

Jeff J. Sourbeer
Duke
Largo, FL

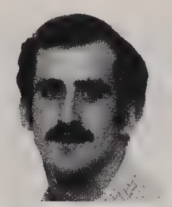

Barbara Spector
Cornell
New York, NY

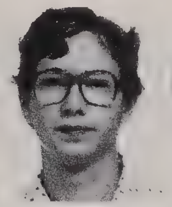
Frank Spence Jr.
Florida Tech
Orlando, FL

"T" Stanley
Duke
Savannah, GA

Roy M. Stein
Massachusetts
Montgomery, AL


W. Chad Stephens
Davidson
Littleton, CO


Stewart Stowers
Duke
Signal Mountain, TN

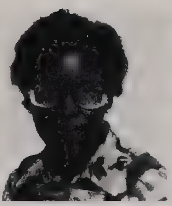

Sam B. Thielman
Wheaton
Montreat, NC

Margo Thienemann
Duke
Rockford, IL

David W. Trader
Stanford
Greensboro, NC

Bill Tyor
Emory
Durham, NC

Tony van den Berg
W & L
Winter Park, FL


Patricia Watkis
City College, NY
Brooklyn, NY

Bob Whitehurst
N.C. State
New Bern, NC

Bernard Wilcosky
Methodist College
Fayetteville, NC

S. Lamont Wooten
Duke
Greenville, NC

Class of 1981

C. Poyet

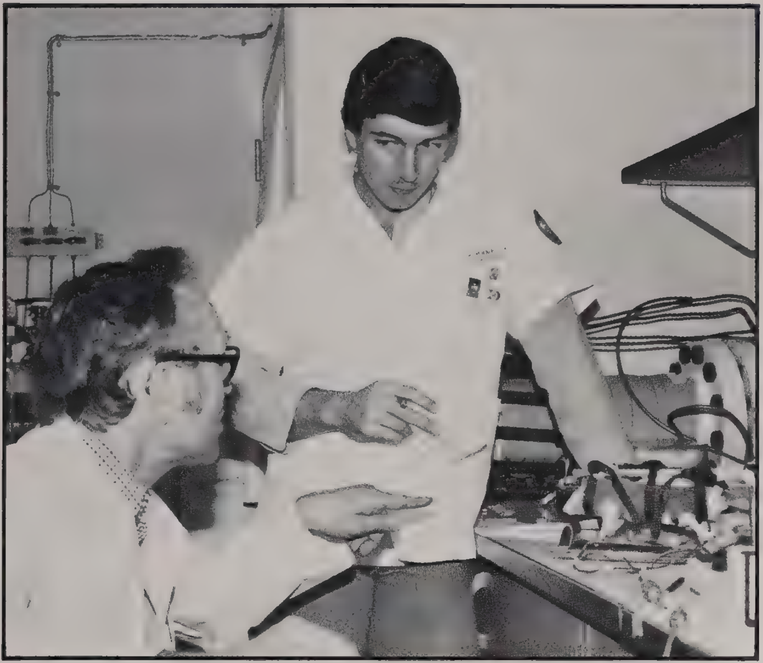
P. Bronec

J. Kappa

B. Murdaugh

C. Lesesne

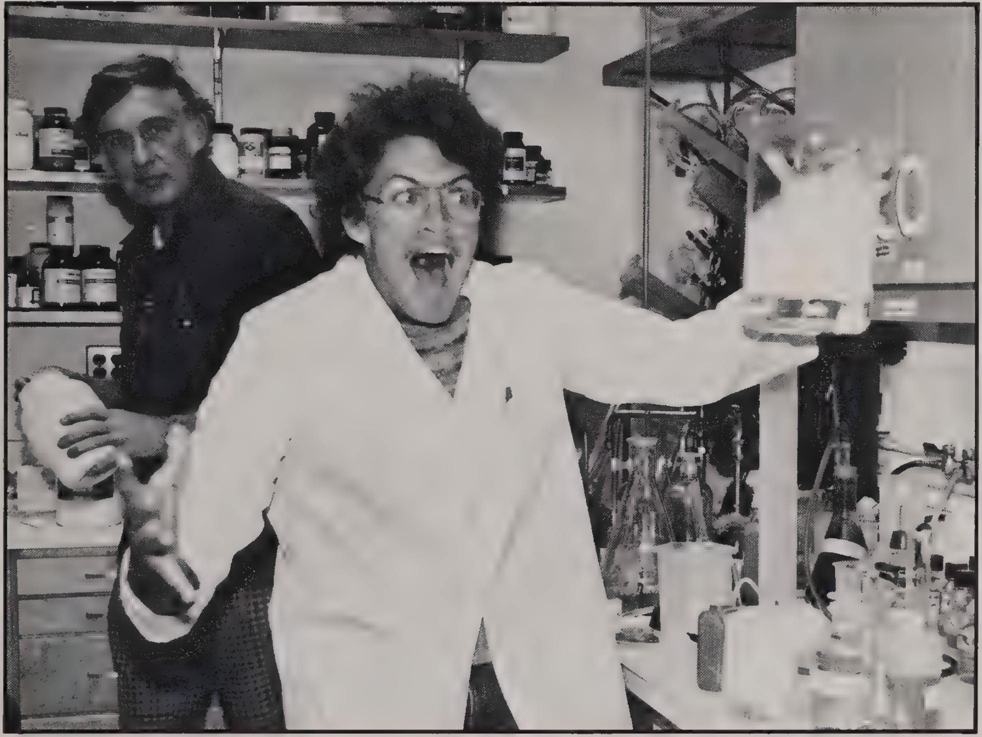
J. Leone



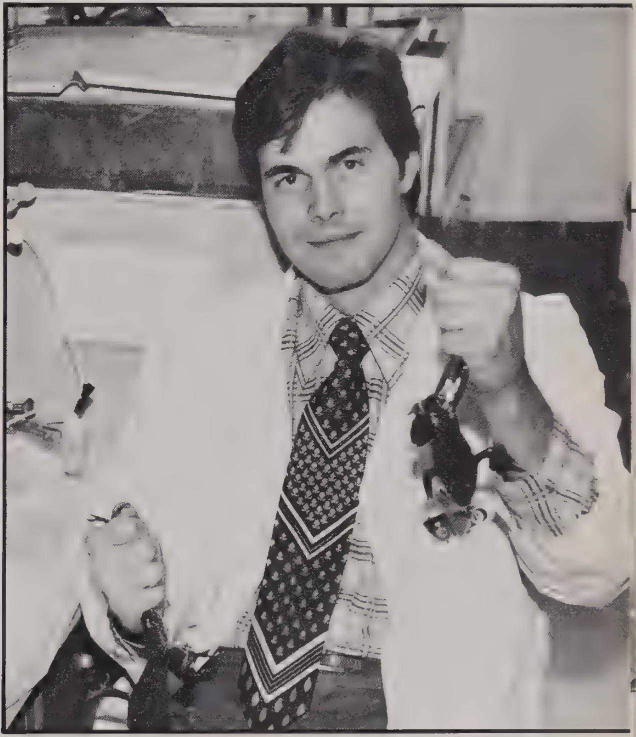
B. Wilcosky

The third year of medical school is illustrated on the following pages by individuals of the class of 1981. Two quite different years precede the third year of elective courses and free time. How we arrived to third year and why we appreciated this year is briefly sketched, followed by what we did in our third year of Duke medical school.

First year a hundred and fourteen strangers were poured into the Amphitheater mold and set for five days a week, eight hours a day, over nine months. They — we turned out with much in common. We knew one another academically and socially. That which made us unique, those differences we brought to this experience paled before the pursuit of yesterday's lecture and we ended up thinking we were more alike than we really were. Yet it can't be denied we were infinitely more alike than we had been. That initial emersion into medical knowledge was pervasive. We communally experienced group crams, parallel epinephrine bursts, and post-exam binges.



F. Spence

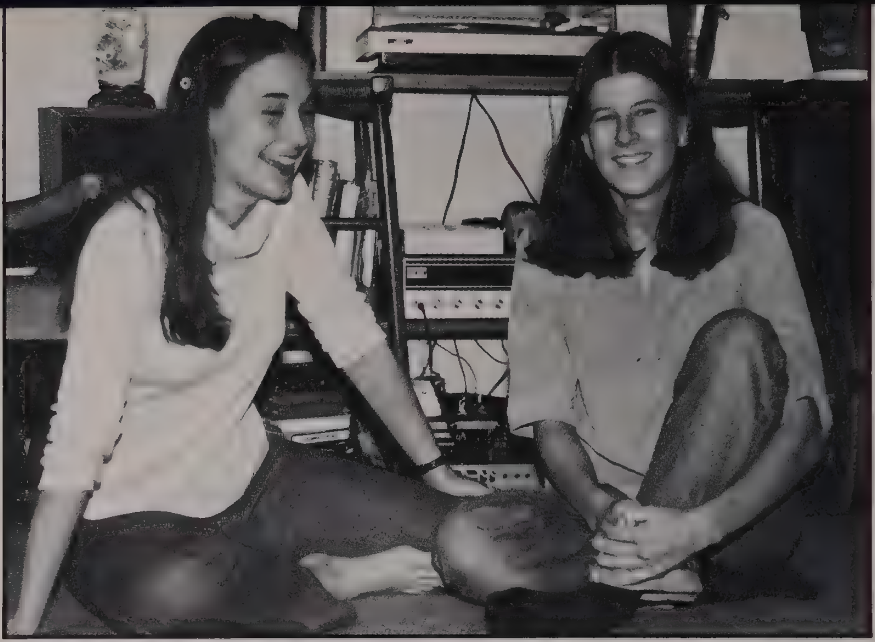


T. Van den Berg

S. Stowers

R. Anderson

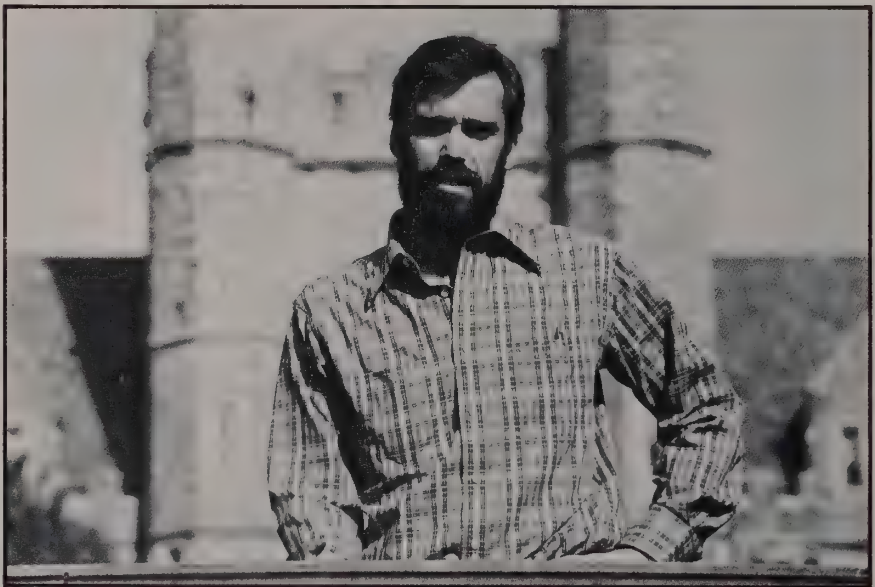
B. Ferguson


N. Dunlap, E. Theg

M. Thienemann

D. Allen, P. Bressler, J. Morrison

B. Putnam


Q. Snyder

D. Simel, J. Piscitelli

We entered second year rotations hungry for a real patient. Contact with the medical world became more personal, more applied. Second year we incorporated the maze of hospital zones beyond the CTF green zone into our fund of knowledge. Most of us got to know the Vets, tasted the 36 hour-on phenomenum of Carter suite, maintained an epinephrine peak for the one hour of Dr. Sabiston's Thursday conference, presented to attendings, forgot most of first year and learned more than first year. We spoke casually and knowingly (and proudly) of LP's, problem lists, skut, and the data base. Second year we spent more time in the hospital than first year in the library. The time flew (retrospectively) and it became hard to remember the naivete and ignorance of our first clinical days or of first year's Physical Diagnosis, when you listened to a chest for five minutes and finally realized the diaphragm was turned the wrong way.

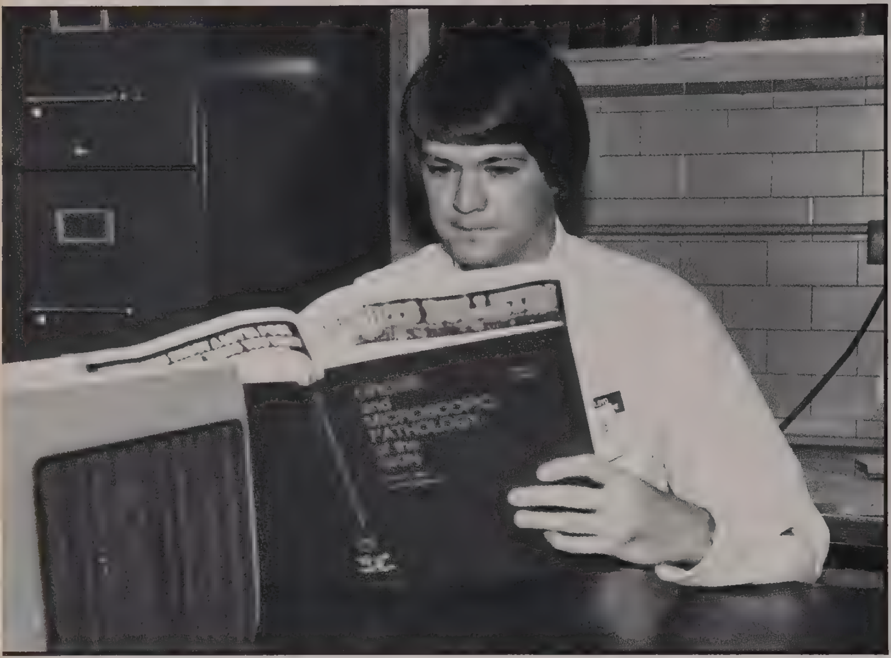
Class of 1981

C. Moritz, Patella, M. Gillman

J. Dein, N. Dein

G. Mencio, P. Buescher, P. DeLuca

Tung Qua, E. Koo, Chu Chai



L. Floyd

C. Grace

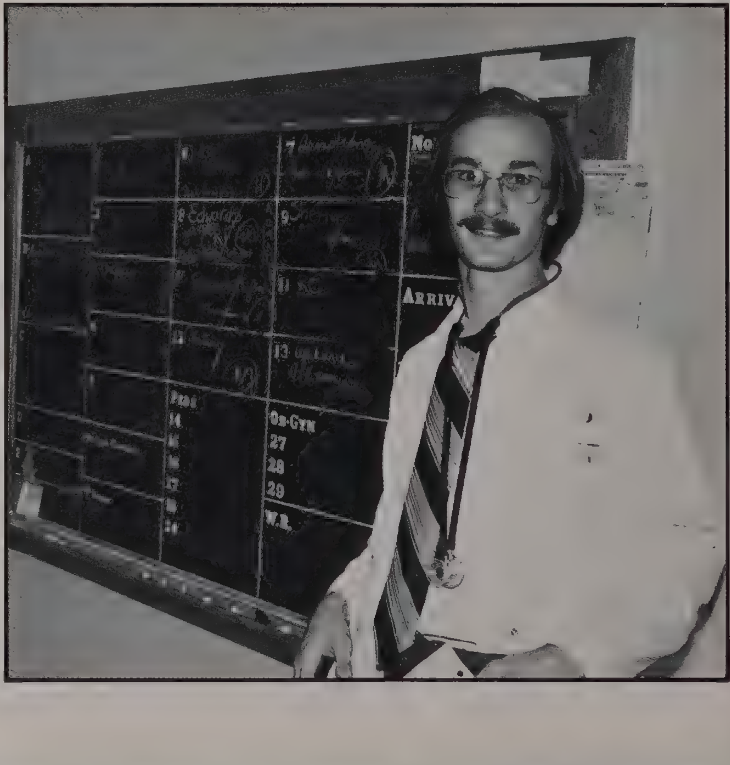
D. Davidson

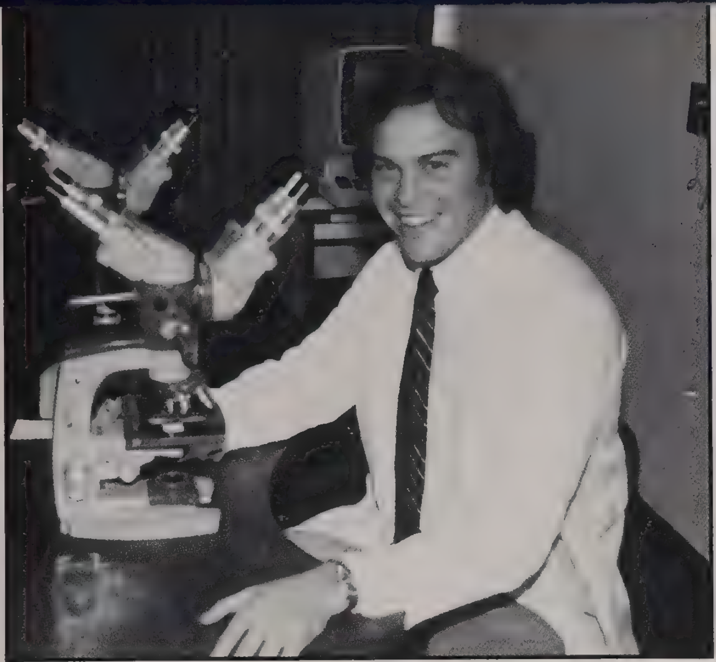
Class of 1981

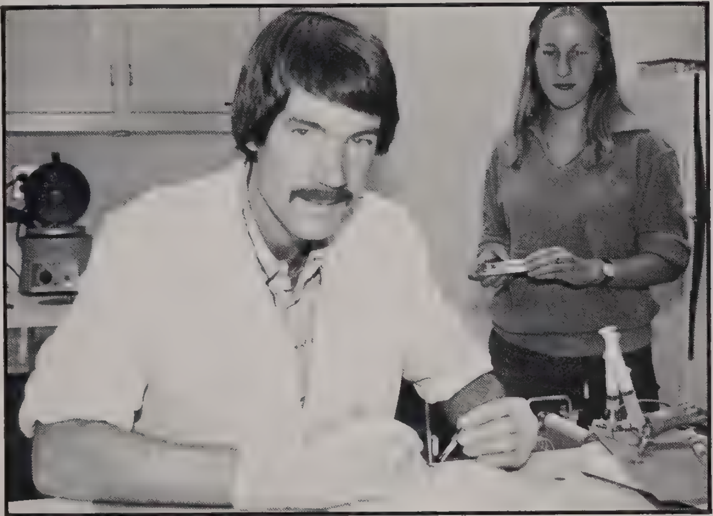
S. Thielman

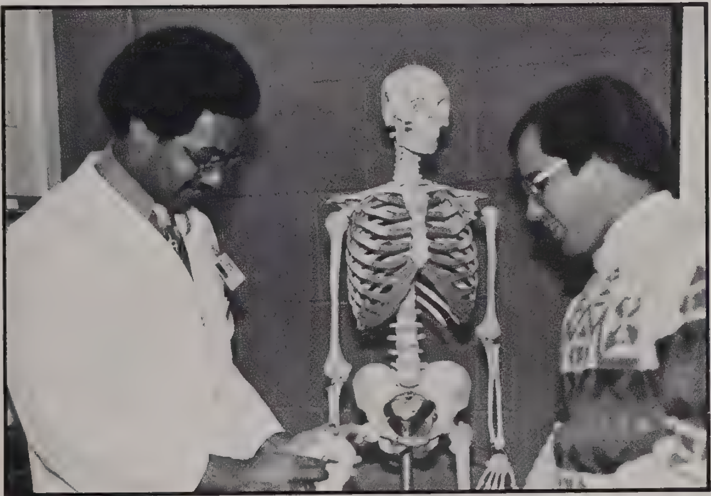
T. Lee

B. Spector




G. Lourie


H. Morris

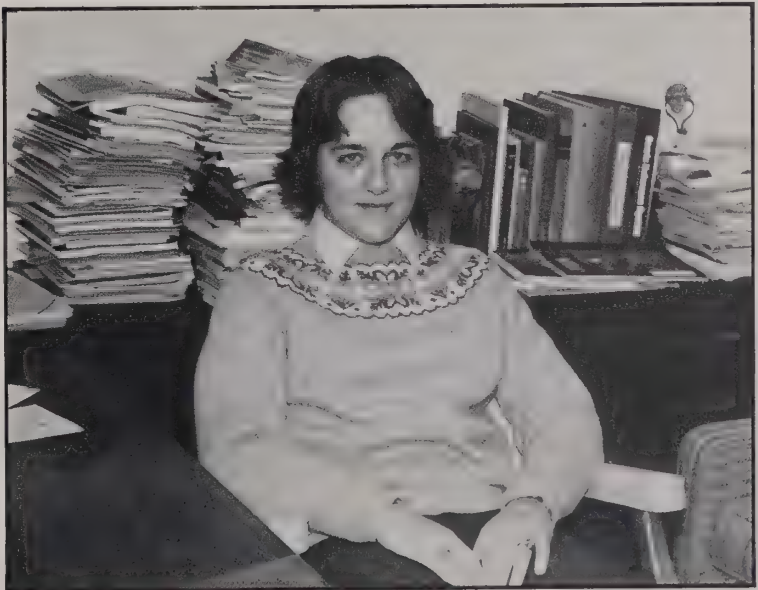

K. Riley F. Brazeal

Third year finally came. Third year at Duke Medical School is an anticipated year of golden freedom. For most of us academically, it meant electives in basic science or research.

Laboratory work paled some collegues (and tanned others). It also made them impossibly articulate on the very footnotes of biochemistry and immunology lectures most of us had lost quickly in the haze of first year overload. Our peers entered the world of authorship, national meetings and poster sessions.

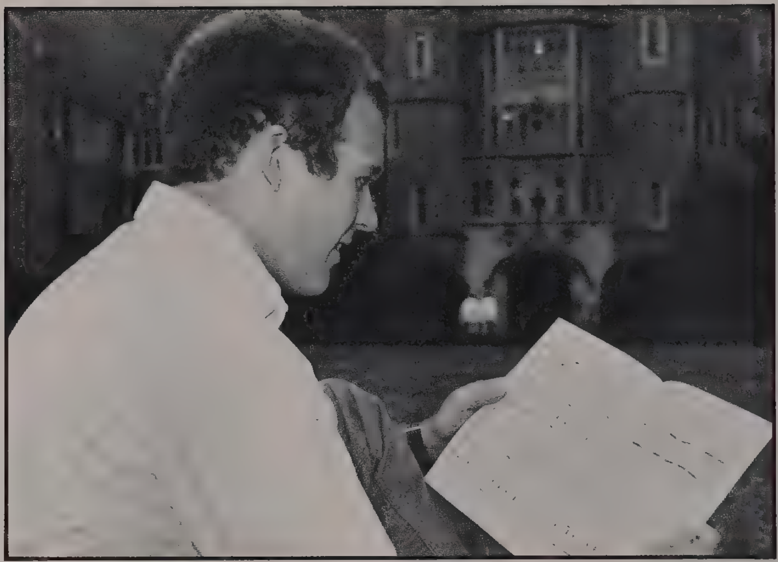
Others of us went back to the classroom. Smaller groups, narrowed focus, brought new understanding and appreciation for data probably presented first year (since EVERYTHING was presented ONCE first year), but now we retained it as a useful concept pertinent to a whole disease or clinical presentation. Our first two years we had more or less learned the language and indiscriminately picked up bits and pieces of application. We knew more now, so it was easier to learn more. Gone (almost) was that lost feeling of first year when total ignorance compelled us to learn everything, because we didn't know the trivia from the headline. We presented seminars to our classmates and had references to pass out. Some of us even had slides! A number did two month duty on Autopsy or Surgical Path. Neither classroom nor research, Path was a supervised chance to learn by doing. A chance to chew what had been swallowed whole first year. Surgical Path was an early taste of internship, where the distinctions between a frozen section and the permanents became apparent. Where you learned what cancer looked like and could spot a lymph node at a hundred paces.

J. Porter


A. McKnight

Class of 1981

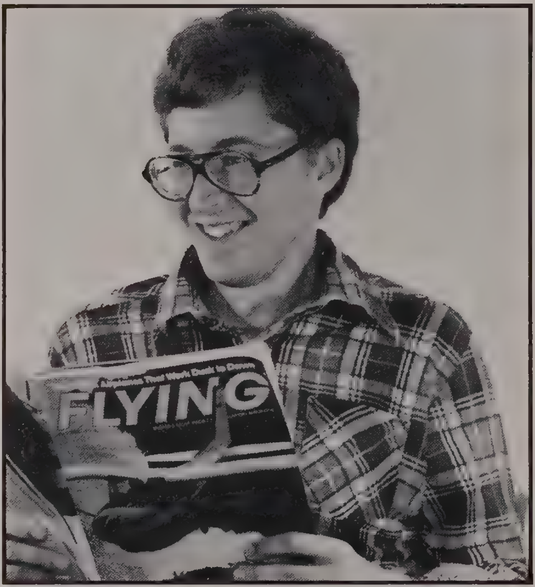
E. Koo



S. Keener

D. Calvert

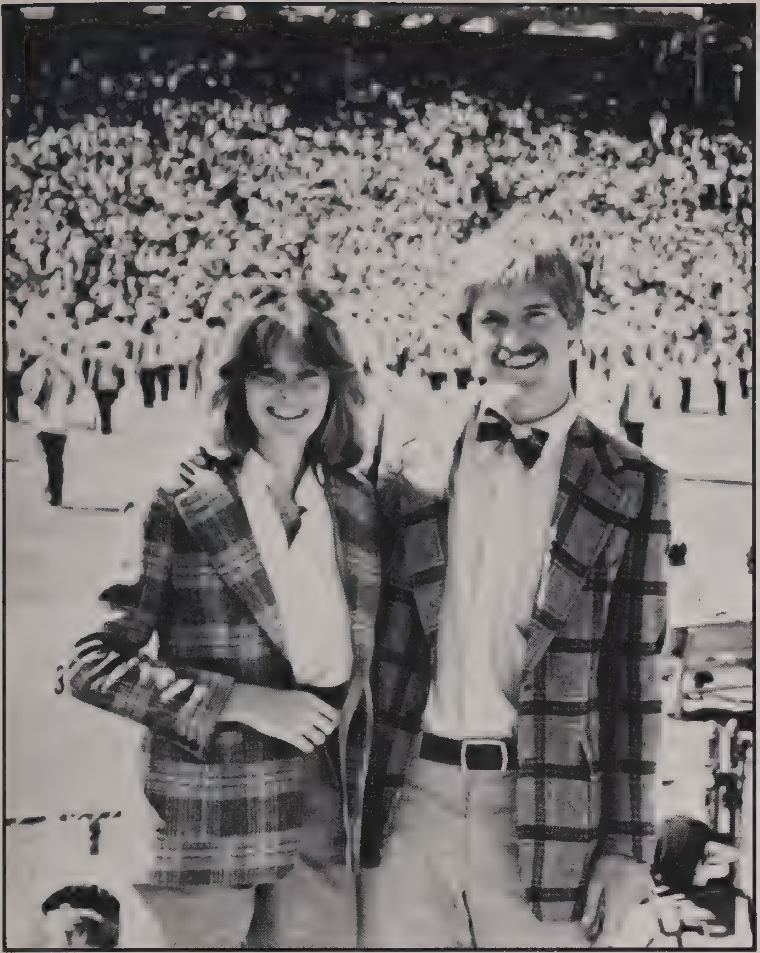
L. Sewell



D. Blakey

G. Ashland

B. Watson



V. Jorgensen, B. Peters

The long awaited third year also meant time to play croquet (and dress up to do it), laze in a hammock, shoot skeet, have and attend dinner parties and wine-tasting parties, see movies, read best sellers, take pottery, quilting, and belly-dancing classes, swim, bike, golf, run and more or less behave as some care-free liberal arts undergraduate.

March and April brought the annual Student-Faculty Show with its biweekly writing sessions and frequent practices. As always, the availability of the third year class members made them the working force of this years' show — Doc, a **DUK-U-MENTARY.** The props of the old and new hospitals rose behind us and our thirteen member band peopled mainly by the third year class accompanied the best show in our three year collective memory.

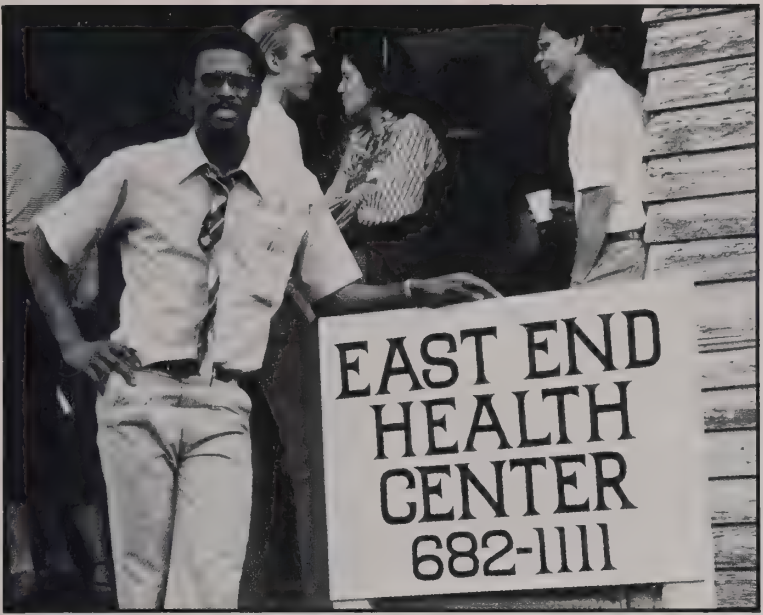
G. Arens, B. Parkerson

B. Watson, G. Arens

L. Dunn, B. Middleton, G. Arens, J. Segars, B. Parkerson

T. Clark, Julie, R. Stein, J. Kunin, E. Shugerman

J. Ramage, L. Wooten, C. Block, D. Milbauer, B. Tyor



C. Cooper

Third year we backboned the East End Health Clinic, had a bowling league, designed lunch bag seminar sessions, and almost universally we contributed time and effort to the Aesculapian Year Book undertaking. Prompted by the constant and softly-drawled persuasion of the third year medical student editor, we sold ads, yearbooks, typed and wrote. We also guided tours, sat on admissions committee meetings, and won a more than representative number of Shifting Dullness puzzle prizes. Displacement activity contributed to the research left unfinished, the experiments that needed follow-up, the papers half-written. Even as we planned to return and complete projects, we realized the improbability of doing so, once we were caught up in fourth year rotations and residency applications.

Class of 1981

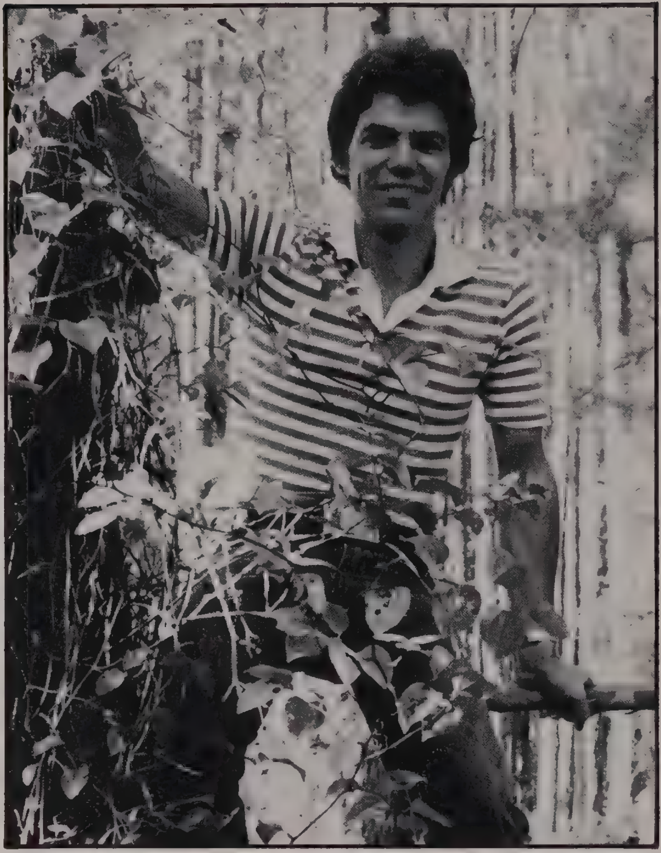
N. Milliken

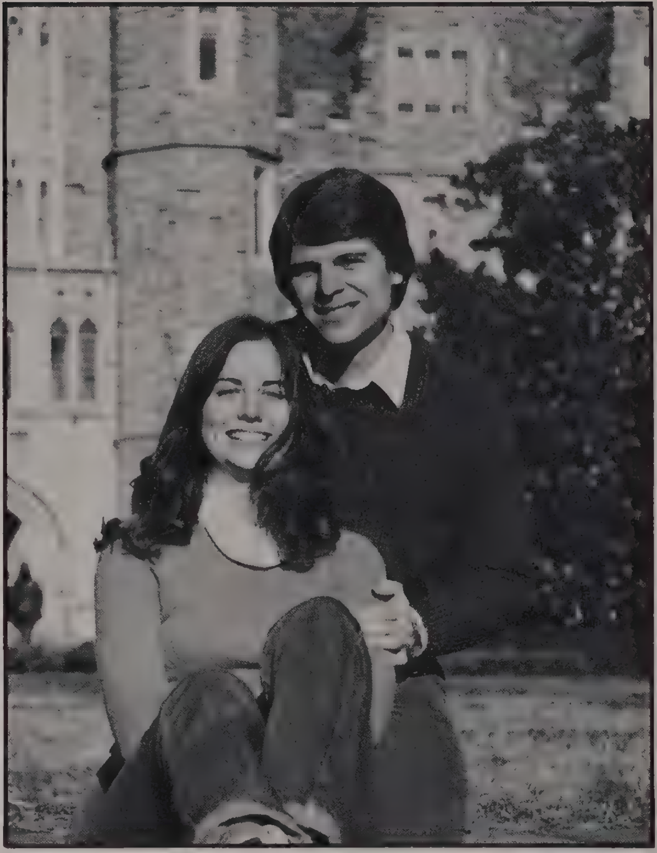
R. Albrecht & rabbit

M. Angle

A. Russell, D. Siedler, G. Lorensen

Class of 1981


E. Miller


J. Christenbury

R. Campbell, S. Schwartz, C. Stephens, J. Germino

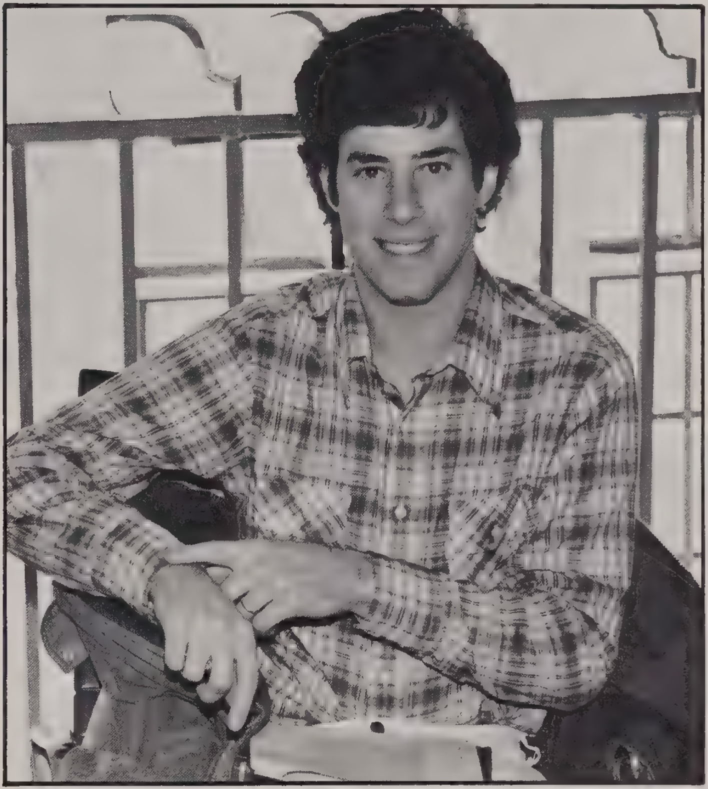
C. Davis, Susanne

J. Sourbeer

D. Montgomery

So little gets done in a time which passes so quickly. Most of us were more inert than we had anticipated. We were accustomed to the structure and ward business of our first two years. With this gone, we'd forgotten how to fill the time ourselves and sometimes we were lonely.

Toward the end of third year we began to wonder more acutely what field of medicine to go into. We started to read about different residencies, puzzle over who to get recommendations from, figure out the match, and some of us became anxious as the light at the end of the Duke Core Curriculum grew nearer.



E. Reiman

G. Hudson

P. Bowe, J. Morris

D. Harlan, Nancy

B. Brasher, G. Berrebi

Class of 1981

P. Watkis

D. Clapp, B. Whitehurst

J. Davis, Suzanne

J. Lucas & friend

M. Adams, T. Curiel

T. Stanley

D. Albert

David Albert: research — cardiac mechanics (Page Anderson, MD) started a medical electronics company "Hi Technology Systems"

Renata Albrecht: pathology; props; needlepointed Duke crest; caricatures; tennis . . . Drahy rodicia — Dakujem . . .

Dave Allen: jamming regularly; directed Student-Faculty Show band; starred in Ellen Theg's A Walk In the Woods; getting psyched for peds

Roger Anderson: research — estimating myocardial infarction size from contractility on ventriculograms (Raymond Ideker, MD); determination of lung volumes and lung density with chest CT scan (Laurence Hedlund, MD); cross-country running; sailing

Marcia Angle: tried to turn backyard clay into vegetables; propagandized about the Student's Rural Health Coalition; tried to keep pace with Nancy Milliken's great ideas

Gwen Arens: IM volleyball; took up piano; EEHC; classes

Gloria Ashland: research — assay for nuclearestrogen receptor (Ken McCarty, Sr., PhD); pottery classes; AMWA

Ralph Baker: research — transcatheteral electrocoagulation studies using dogs (William Thompson, MD); engaged to Susan Moran 2/80

Steve Barnes: research — sexual function and behavior in old age (Ilene Siegler, MD); hypnotherapy training (Richard Lucas, PhD); sex therapy and education (John Steege, MD); Duke Endowment — Durham; little league baseball coach; church choir director

Dave Blakey: flying; beach; classes

Craig Bloch: research — biochemical kinetics in immune function (Nicholas Kredich, MD); "Godel, Bronowski & Blake — toward a humanist natural science" and "Ethics of Human Experimentation"; attempted a marathon; studied photography

Pam Bowe: research — "Effect of Beta-blockade upon Myocardial Healing after Infarction" (Galen Wagner, MD); presented P&G research "Microbiological properties of 99m Tc labeled HMDP, skeletal imaging agent; worked with Dr. Zeanah and parents of congenitally deformed infants in the ICN; skiing; jogging

Bruce Brasher: IM track meet — shot put; commuted to Raleigh q Wednesday; read **Shogun**

Febe Brazeal: research — "The analysis of Echovirus 30 by Radioimmunoprecipitation"; EEHC

Pete Bressler: research — chemotaxis and phagocytosis in PMNs (Wendell Ross); IM softball

Peter Bronec: research — epidemiological and clinical parameters in life threatening hemoptysis (Larry Rigsby, MD); skiing; tennis

Phil Buescher: research — coronary blood flow (Andy Wechsler, MD); bowling

Dick Calvert: DJ'ed "The Red Hot Hit Line" on WDUK; sailing; continued to wax and shine classic 65 Ford Galaxy

Robb Campbell: church choir; studied French; volleyball; bicycling

Jonathan Christenbury: research — killed a lot of mice and a few dogs; then wised up and took some classes! cycled on new Trek; sang tenor — church choir; lived in a house with seven other crazy guys

Deb Clapp: married Bob Whitehurst 7/14/79; worked on house; made furniture; took classes

Tim Clark: spent summer '79 in Japan; climbed Mt. Miyoko; lots of sailing and long distance bicycling

Tyler Curiel: can't quite place the face? I was acquired in a recent off-season trade from the Medical College of Georgia; spent third year as a second-year student, so I can be a fourth-year student in July; will apply for internships, once I resolve my identity crisis

Diane Davidson: EEHC; summer '80 in England to work with John Lister

Chip Davis: research — strength of microvascular anastamoses (James Urbaniak, MD) in orthopedic microsurgery research lab; married Susan Beck 8/4/79; tennis; a hell of a lot of golf

John Dein: research — "Augmentation of Myocardial Blood Flow with Atrioventricular Sequential Pacing: The Importance of the A-V Interval" (James Cox); marriedNancy Meek on 12/30/79; sailing; golf; tennis; and accompanying wife (an aspiring pro golfer) to various tournaments

Pete DeLuca: married Regina Murphy 5/18/80; bowling; continued to frequent Bats

Nancy Dunlap: independent computer course — wrote program on normal lung volumes; "Adenocarcimona of the Pituitary — a Case Report and Literature Review"; bought a bicycle; running; starred in Ellen Theg's A Walk in the Woods

Laurie Dunn: research at Mayo Clinic on cancer; bellydancing classes; Women's IM basketball

Berrylin Ferguson: research — "Blood Group Antigens in Dysplasias of the Human Mammary Gland" and "Immunoglobulin localization in Benign and Malignant Breast Lesions" (Ken McCarty, Jr., MD, PhD); fostered stray cats Wachovia & Morsel; squirrel hunting; lots and lots of bicycling

Larry Floyd: Duke Endowment — Hillsborough; jogging; classes

Ed Fudman: research — a specific receptor for chemotactic peptides — initiates macrophage chemotaxis, (Ralph Snyderman, MD); played a lot of tennis

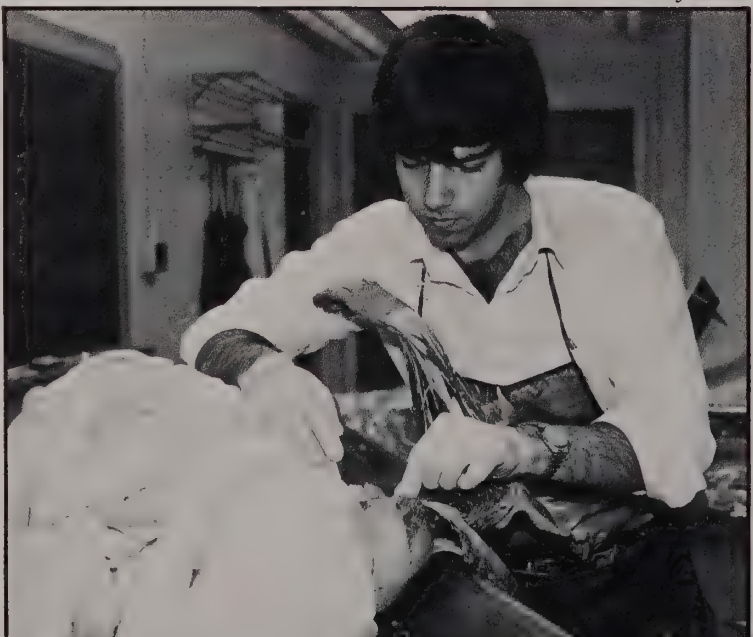
Matt Gillman: research — "Carotid Body Tumors: Case Report and Epidemiologic Review" (Seymore Grufferman, MD); bowling; softball

Candis Grace: research — effects of interferon (David Lang, MD); autopsies never-to-be repeated; yearbook; minority women in medicine leadership workshop 10 / 80; SNMA national and regional conventions; *First Contact:* radio health series writer.

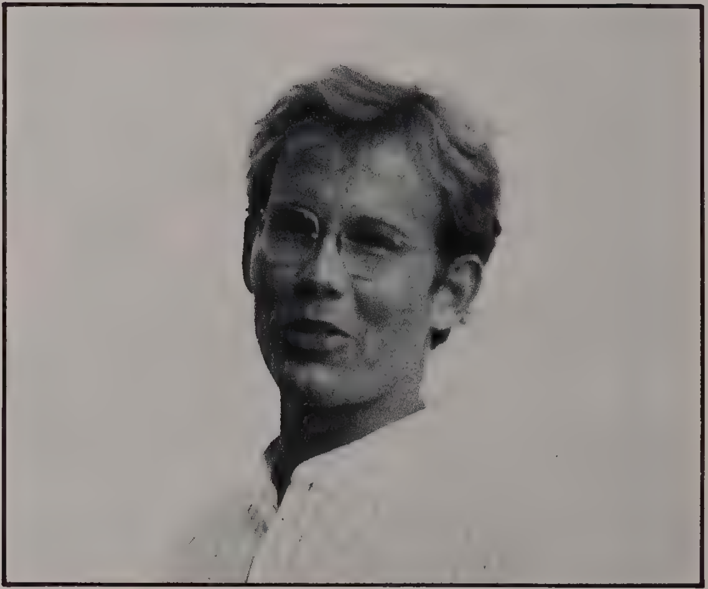
J. O'Neill

D. Trader & H. Severance

J. Kreit

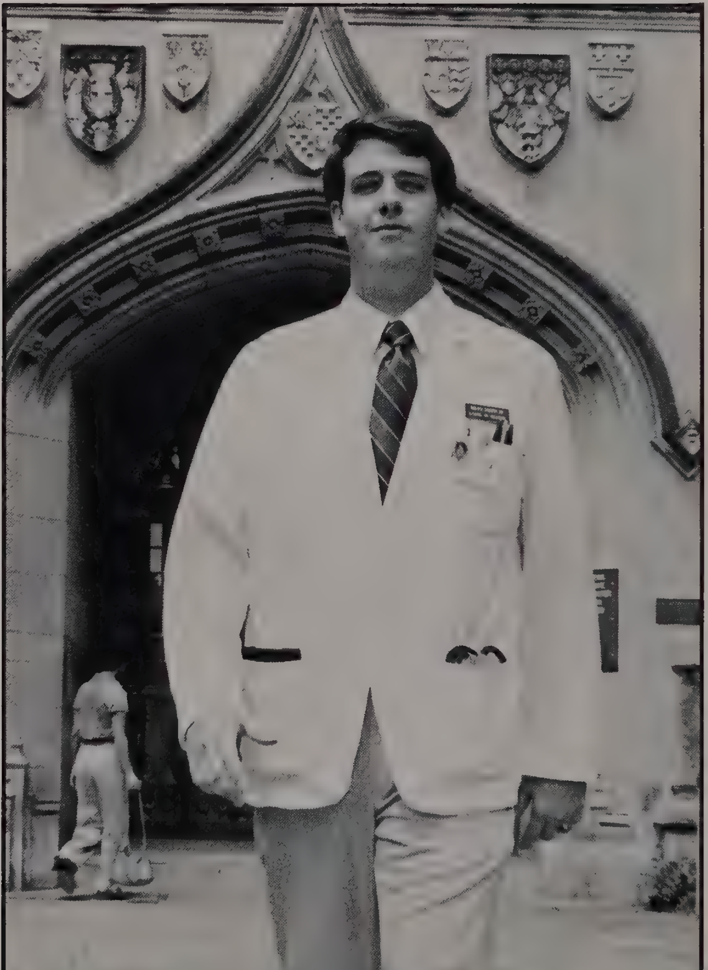


C. Lottich



B. Rankin

R. Baker



Class of 1981

A. Lansing

S. Barnes

P. Sholar

Dave Harlan: research — nutrition and hypertension (George Mann, MD, Vanderbilt); married Nancy Peters 5/17/79

Geg Hudson: took courses; "Third year is the good life."

Eddie Koo: research — ocular toxicity of gamma-glutaminyl-4-hydroxybuterone — compound derived from the mushroom (Steve Vogel, MD); Durham city league volleyball; broadened my culinary and oenological skills; Hong Kong

Verena Jorgensen: Duke Endowment — Elizabeth City, NC in pediatrics; five week trip to SW, West Coast, Utah and Colorado; engaged to Brian Peters 3/80

Jeff Kappa: research — collateral blood flow in acute MI (James Cox, MD); co-director North Carolina Students; Rural Health Coalition; engaged to Rosanne Pollack

Steve Keener: Pitchfords (musical group); Duke Chorale — trip to Walt Disney World; admissions committee; RMSF research

John Kreit: dissected entire body; lots of guitar; engaged to Marilyn Will 6/80

Jean Kunin: research — cyclopharmocology and depression (Mark-kee Linnoila, MD & Jonathan Davidson, MD); lots of NC backpacking; sewed gaiters

Joanne Lang: Duke Endowment — Durham; neighborhood housing service; engaged to Tommy Lee 3/80

Ann Lansing: EEHC; co-editor of yearbook; starting a vegetable garden; sewing; quilting; bought a house; worked in Cherokee Indian Hospital, summer '79

Tommy Lee: research — myocardial infarct size with respect to the vascular bed (Keith Reimer, MD); *1st Contact* co-editor; engaged to Joanne Lang 3/80

Cap Lesesne: research — effects of radiation in reconstruction; assessment of flap viability by trancutaneous, PO2 (Don Serafin, MD)

Gilda Lorensen: research — "Home vs. Hospital Delivery — Literature Review"; NIH — Epidemiology of Teenage & Diabetic Pregnancy; *1st contact* co-editor; AMWA librarian; EEHC;

Gerrie Lourie: research — experimental pulmonary infarction in dogs as studied by CXR, CT, and pathological exam

John Lucas: editor, business manager and photographer of the largest medical school year book in the USA; engaged to Marsha Adams MD '82 after knowing her for 6 weeks and dating her for 4; president, class of '81; friendly guy, though classmates fled him in fear of being coerced into doing MORE work for the yearbook

Anne McKnight: research — T-Ag positive leukemia — membrane characteristics of the T leukemia cell (John Falletta, MD); peripheral blood staining in leukemia with Merocyanine 540, effects of cryo-preservation on T cell stability (Andrew Huang, MD); admissions committee; ETOH drip 8/39/79 to 5/80; IM women's B-ball

Greg Mencio: pathology in New Zealand for 2 months (re: Charlie Daniels, MD — it's a national law, everyone gets an autopsy there)

Bill Middleton: research — in ultrasound on predicting IUGR prenatally (James Bowie, MD); rediscovered 1) the potter's wheel, 2) silk screening, 3) semi-effective volleyball serve

Dave Milbauer: played lots of music; weightlifted; skiing

Nancy Milliken: BBLS on Women's Health and other racy topics; hypnosis research; Dean's Hour committee; fall & winter advisor to Northern Orange county teenage health council; **1st Contact** editor; AMWA; women's pelvic teaching group; leadership workshop for women in medicine 10/80; bellydancing classes

Hugh Morris: research — "The Effect of Acute Normovolemic Hemodilution on Reperfusion on Ischemic Extremities" (in orthopedic microvascular surgery); Dean's Hour Committee; Davison Council; usual third year courses

Jim Morris: research — myocardial blood flow (Joseph Greenfield, MD & Fred Cobb, MD); skiing

John Morrison: three months in a mission hospital in Pakistan (arrived 3 weeks after the American Embassy was burned) by way of England and Egypt

Beth Murdaugh: simple time for personal renewal; finding a professional niche, while getting back to good literature; long walks, cooking and enjoying the mornings again

Jim O'Neill: research — "Relative Corneal Neovasculogenic Abilities of Various Vasoactive Drugs Using an Ocular Perfusion System" (Gordon Clintworth, MD)

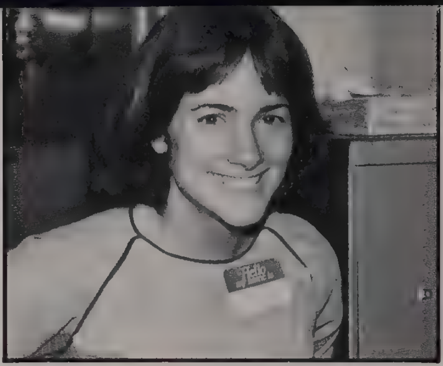
Bob Parkerson: tropical medicine basic science study in Liverpool, England; clinical tropical medicine in Africa, summer '80

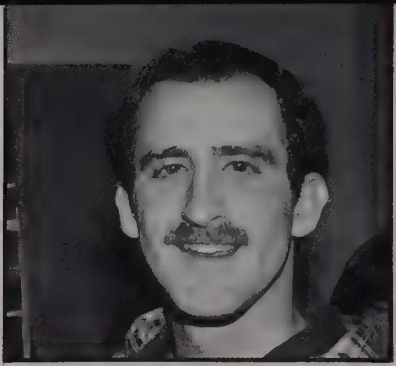
Bryan Peters: Duke Endowment — Elizabeth City, NC in radiology; five week trip to SW, West Coast, Utah and Colorado; IM softball; Europe, July '80; engaged to Verena Jorgensen 3/80

Joanne Piscetelli: research — an additional mechanism for adenosine modulation of in vitro platlet function (Judy Anderson, MD); engaged to Dave Simel

Jan Porter: research — isolation of pancreatic cancer neoantigens; family practice preceptorship — Sparta, NC; Engel Society; Yearbook; cheesecake taste testing protocol; investigation of strategies of contract bridge; comparative evaluation of Happy Hour establishments for attitude adjustment; therapy weekends to beach and mountains

Claire Poyet: research — endocrinology research with Jerry Feldman, MD, i.e. killed rats all year; learned to snow ski


L. Sewell


S. Stowers

F. Birmingham

L. Floyd

J. Piscetelli

W. Pryor

Class of 1981

J. Porter & P. Sholar

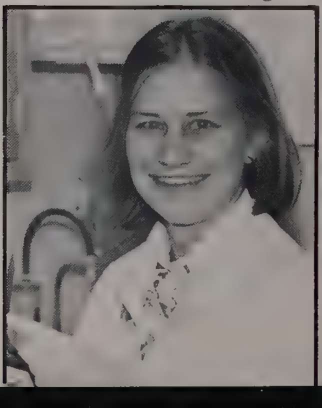
M. Thienemann & B. Rankin

J. Ramage

B. Middleton & L. Dunn

N. Milliken

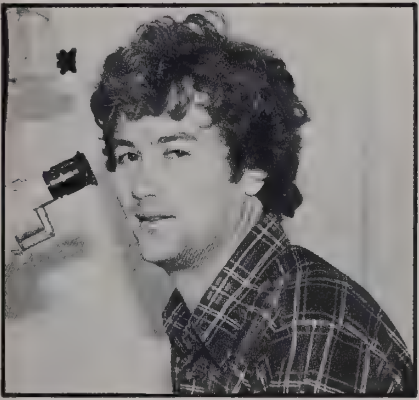
B. Ferguson



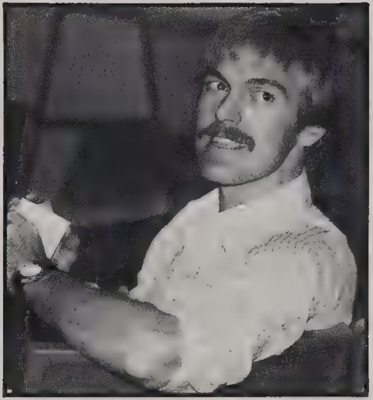
M. Thienemann

J. Segars

D. Trader; C. Grace; A. Russell; D. Siedler



C. Davis



B. Peters

P. de Luca

D. Milbauer & M. Ling

L. Dunn

William Pryor: research — "Time course for Salvaging Ischemic Myocardium" (James Cox, MD); bowling; EEHC; tennis

Bill Putnam: research — peripheral control of hepatic glucose output (Harold Lebovitz, MD & Scott Jones, MD); two new Goldens

Jim Ramage: research — two-diminsional echo-cardiography assessing left ventricular mass and volume; identification of two-dimensional echo criteria for high risk mitral valve prolapse (Rick Stack, MD); golf; tennis; backpacking — NC; whitewater; playing trusty Gibsons (guitars)

Brandon Rankin: research — rapid visual assay to detect mono-clonal antibody antigens (George Eisenbarth, MD); CT sectioned a frozen cadaver; some bowling; IM softball; city league V-ball

Eric Reiman: research — normal and unresolved grief; *1st Contact* editor; taught hypnosis; worked with NC hospice; improved my Billy Packer set shot and my racquetball kill shot; re-agonized 1st year at Duke Med — this time my wife's; solved the mind — body problem

Asela Russell: SMNA; AMWA; *1st Contact:* sex-ed committee; traveling in Bermuda and Germany; Minority Women's Leadership Conferance 10/80

Steve Schiff: research — neurophysiology, theoretical research on voltage clamp theory, experimental research on synaptic transmission; piano playing (auditory abuse); sleep charging before residency

Steve Schwartz: research — cancer epidemiology (Seymour Grufferman, MD); EEHC; classes

Harry Severance: research — validation in a community hospital of criteria for early discharge after acute MI (Galen Wagner, MD); screening study of relationship of systemic hypertension and open angle glaucoma; fixed motorcycles, autos, stereos; with Trader, continued to provide audio effects for numerous parties

Lea Sewell: research — reverse plaque assay using staph protein A in peripheral lymphocytes of human melanoma pt. (Cambier, PhD & Harvey Cohen, MD); EEHC; chapel choir

Pam Sholar: research — "Treatment of Refractory Leukemia with MTX and Thymidine;" comparative evaluation of Happy Hour establishments (and bartenders) for attitude adjustment; student faculty show; chairman of the medical students cancer symposium 3/80; Davison Council; medical trek in Nepal; skeet shooting; beach and mountain weekends with Dr. J. Porter, best friend and therapist; cheesecake taste testing protocol; YEARBOOK!

Earle Shugarman: research — Huntington's disease and fibroblasts (Dr. Tourian); mountain climbing in Colorado "Capitol", "Quandary" and "Yale"; cross-country skiing

Dan Siedler: research — spleen cell supernatent which stimulates the growth of a mixed hematopoetic colony in murine system (Andrew Huang, MD); *Shifting Dullness* editor; movies

Dave Simel: research — cystic fibrosis (John Sullivan, MD); neurology clerkship in Edinborough; Student Research Forum; engaged to Joanne Piscetelli

Quay Snyder: flight instructor, NCSU Soaring Club; IM softball; IM cross country; Thursday night bowling with the boys; sunning and swimming

Jeff Sourbeer: neurological diagnostic computer program; IM sports; various nefarious activities

Barb Spector: research — in opthalmic pathology (Gordon Clintworth, MD); sex ed — taught 7th graders; EEHC; sailing; quilting course; microbiology lab tech; engaged to Michael Hertzberg (grad student in Duke Path)

"T" Stanley: research — the effect of multiple partial coronary artery stenosis on regional myocardial blood flow; designed and constructed monitors 1) ultrasound dimensioning device 2) activation interval timing (myocardial), (Jim Cox, MD — CORE lab); guitar at Manella's and This Side Up

Roy Stein: research — relaxation training and diabetes (Dr. Surwit and Dr. Feinglos); initiation of Holistic Medicine Group; photography; refined my tofu and stir fry vegetables; "If its not one thing, its another."

Chad Stephens: bicycling; taught children's church

Stew Stowers: research — enhancement of allogeneic transplantation with total lymphoid irradiation (Hilliard Siegler, MD); fished; skied; drove to Charlotte every two weeks

Margo Thienemann: homemade bread rose to new heights; learned to scuba dive and went to Jamaica to prove it: Duke Endowment — Sullivan's Island, SC; filled in some 1st year gaps

Dave Trader: research — screening study of relationship of systemic hypertension and open angle glaucoma; NMSA; with Harry Severance, continued to provide audio effects for numerous parties

Bill Tyor: research — neurology (Dr. Davis, MD)

Tony Van Den Berg: research — nephrotoxic effects of cis-platinum with regard to various models of transporting epithelia including frog skin, toad bladder and human RBC's (Vince Dennis, MD); renal function in pts. receiving cis-Pt, renal effects of thyrocalcitonin in pts. with medullary thyroid carcinoma and of PTH in pts. with hyperparathyroidism (Sam Wells, MD); EEHC

Bob Whitehurst: married Deb Clapp 7/14/79; worked on our house; made furniture; took classes

Mont Wooten: back to basics and a normal life with extracurricular diversions, ie. roadtrips; skiing; fishing; lots of guitar; got traumatized; tennis and racket ball

Class of 1981

N. Milliken

G. Ashland, M. Gillman

B. Ferguson

D. Davidson

D. Albert, J. Lucas

T. van den Berg & K. Delaski

J. Porter

T. Stanley

R. Albrecht

P. Nile & G. Lourie

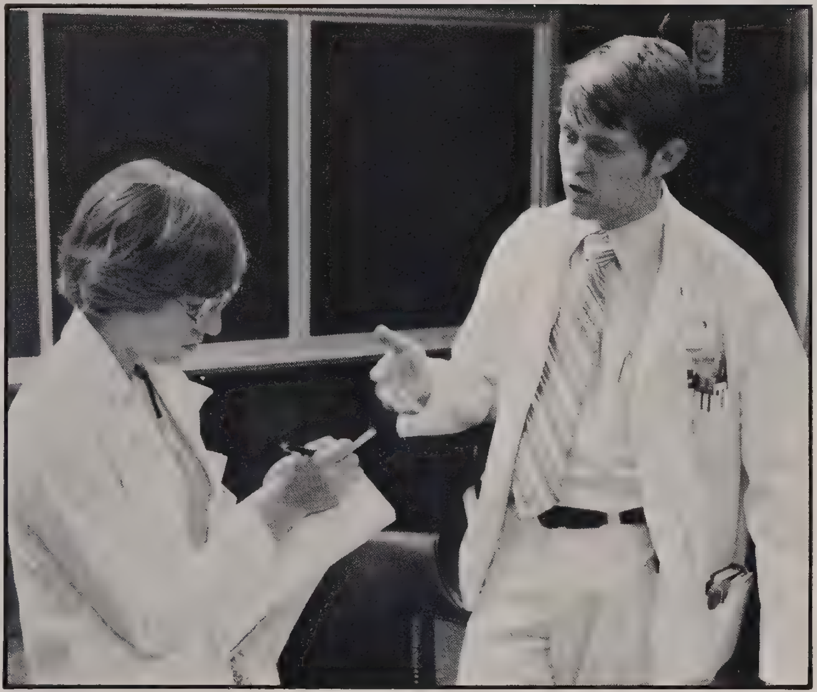
Class of 1981 — September, 1981 — Boards Part II

S. Schwartz, C. Stephens, J. Germino

F. Spence

T. Clark, J. Price, R. Stein, E. Shugerman, J. Kunin

CLASS OF


K. Gutmann, R. Hill, M.D.

M. Gagliano

1982

K. Gutmann

Ballad of '82

(to the tune of "The Beverly Hillbillies")

Now listen to the story
  of the class of '82:
We wanted to be docs
  but we didn't know what to do.
We worked very hard
  and we followed every rule
And so we headed off to the
  World's Best Medical School.

Duke, that is.
David C.'s
PRT's.

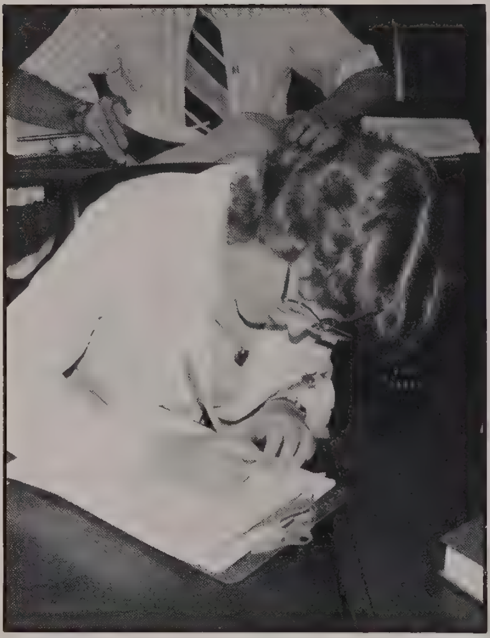
The first thing ya know
  we were in the basement of the Bell,
Cramming in the facts
  was pretty close to hell.
Biochem, Micro, and Anatomy
What this has to do with Medicine
  we couldn't really see.

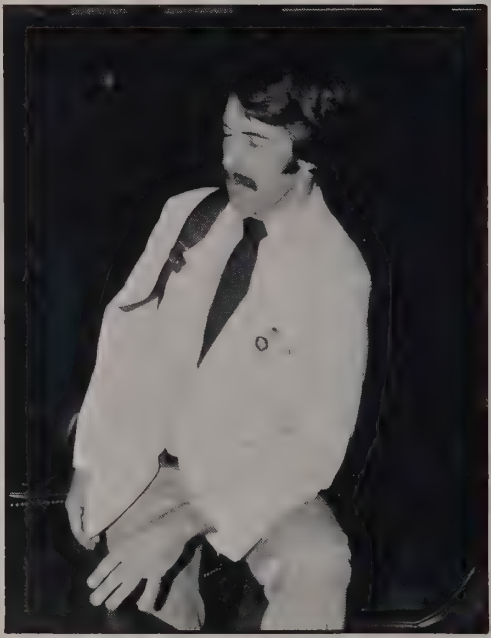
Mnemonics, that is.
The "Core"
What a bore!

And then we were told
  it was time to learn PD.
Histories and physicals
  came not so easily.
But they all said,
  "Clinics are the place to go."
So we loaded up our bags
  to prepare for the show.

Rotations, that is.
White coats.
Progress notes.

S. Emery


R. Pollack


J. Smith

D. Russell, A. Hackel

M. Schwartz

G. Barden

On the wards, we realized
  we had to learn new tricks,
CBC's, catheters and IV lines to fix,
Blood for this, urine for that,
  and on and on it went,
What happened to the glamour,
  in the life of a med student?

Scut, that is.
Fever spikes.
Sleepless nights.

Every morning, bright and early
  we started off with rounds:
Vital signs, temperatures,
  and listening for bowel sounds.
When work was done, we got prepared
  to meet with head honchos,
What they'll grill on this time,
  nobody knows.

Attendings, that is.
Brown nosing.
Charles dozing.

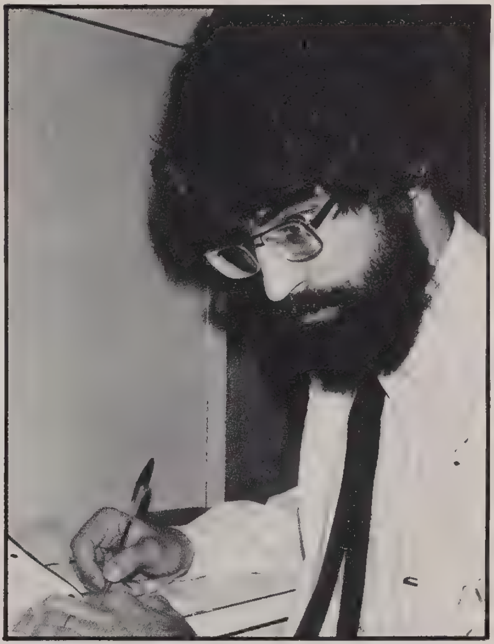
All in all, we were glad
  when second year was through,
We worked real hard, learned a lot,
  amazing what we knew.
But with more to learn and more to do,
  we're ready to move on . . .
As research, class work,
  and freedom come along.

Third year, that is.
Laid back.
Being slack.

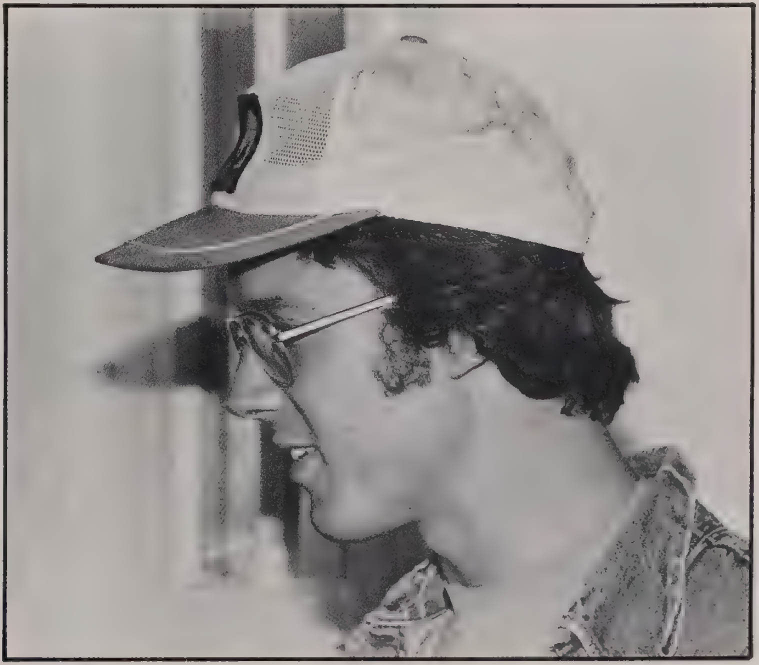
Copy and layouts: G. Michael and R. Pollack
Photos: G. Barden, J. Califf, B. Dodson, L. Wu, P Zeitler, and J. Lucas

B. Dodson

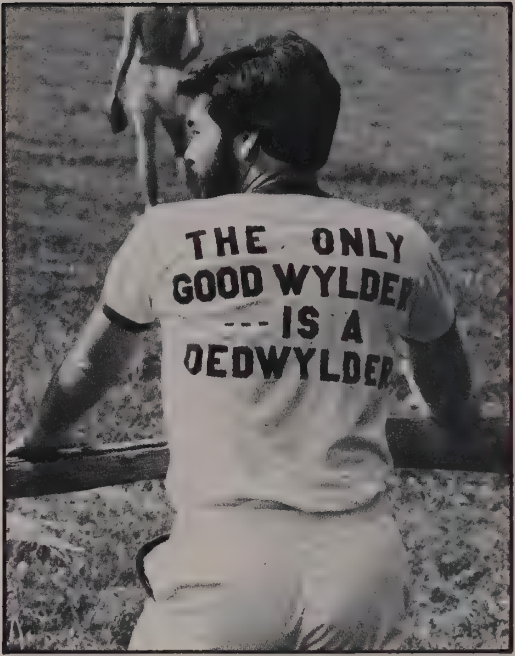
J. Gruber


G. Bertics

D. Kondis


M. Ralston

G. Lourie, S. Williams, D. Anthony, D. DiCostanzo, P. Shekelle, P. Pin, B. Kopitsky

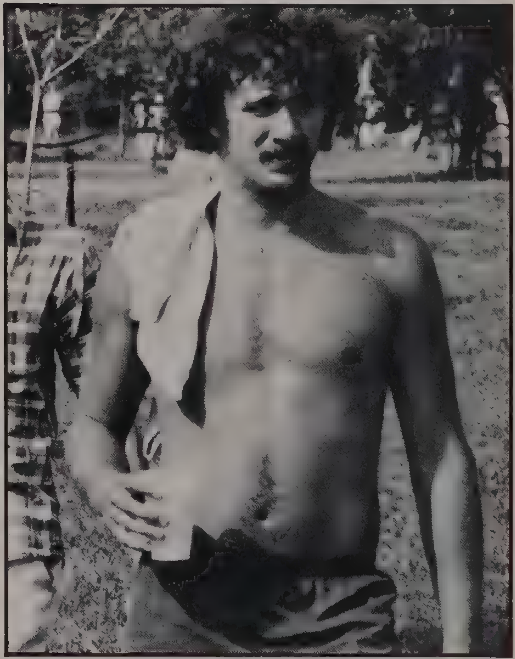


R. Dedwylder

CLASS of 1982

R. Bledsoe, G. McCall

D. Bures, C. Murphy, B. Cance



T. Miller

J. Price

J. Tibbetts, I. Gore

S. Dove, G. Dent, K. Lewis, R. Gilliam, M. Austin

CLASS of 1982

M.A. Bowring

G. Kirschner, M. Tarpey, B. Freeman

Medicine . . .

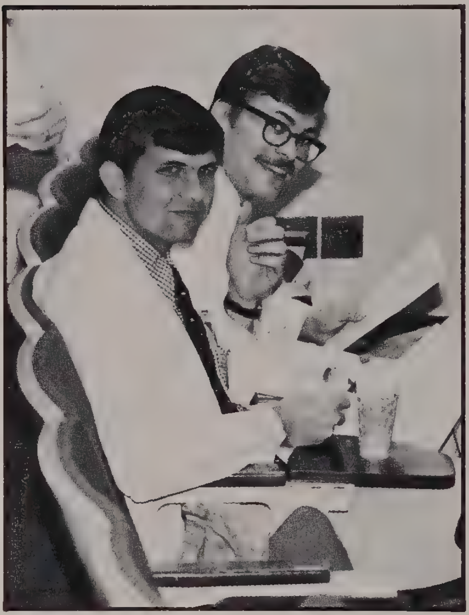
Medicine is a science of uncertainty and an art of probability.

Sir William Osler

Medical science is as yet very undifferentiated from common curemongering witchcraft.

George Bernard Shaw

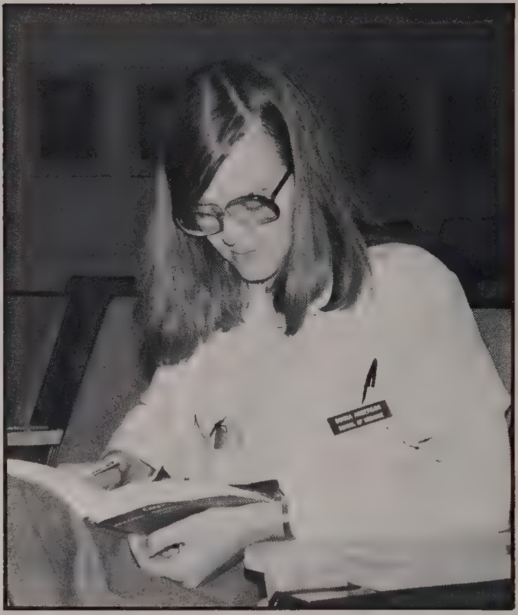
D. Paull, P. Nile



R. Bledsoe, C. Haworth

The aim of medicine is surely not to make men virtuous; it is to safeguard and rescue them from the consequences of their vices.

H.L. Mencken



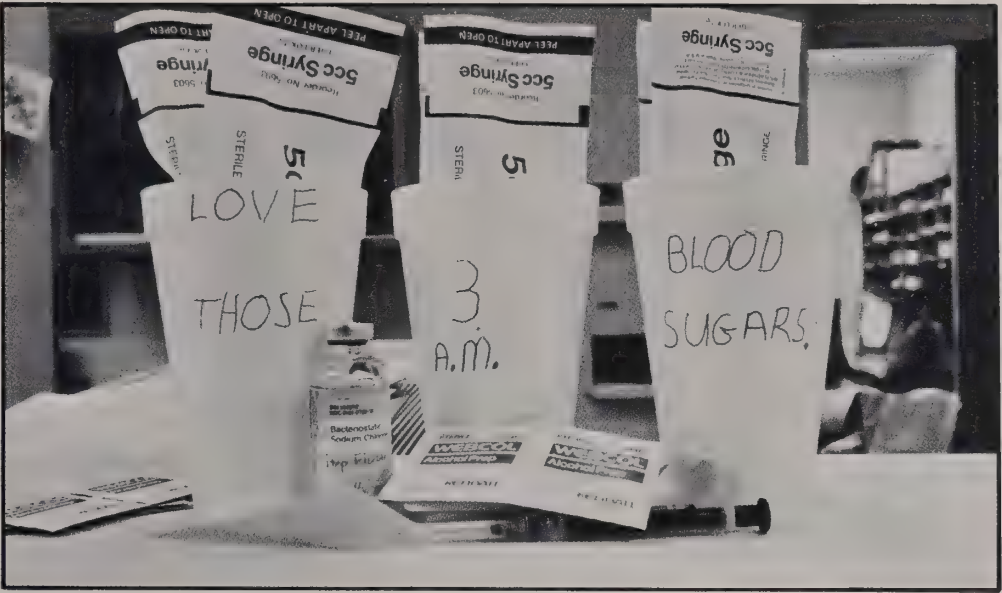
D. Anderson

CLASS of 1982

Science progresses rapidly from the seventeenth century on; medicine became scientific, highly technical, highly specialized, and very costly.

Henry E. Sigerist

K. Lazarus, J. Blatchford



Obstetrics & Gynecology . . .

Medicine is not a lucrative profession. It is a divine one.

John Coakley Lettson

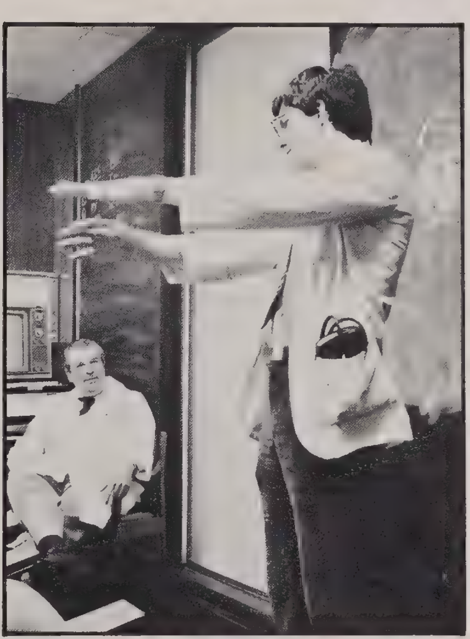
Medicine is an occupation for slaves.

Benjamin Rush

F. Koehler

No, son, that's not quite the way to demonstrate the ovaries and tubes.

Anonymous



R.T. Parker, M.D., C. Murphy

CLASS of 1982

D. DiCostanzo

Medicine should be practiced as a form of friendship.

Leon Bernard

Oh, those late nights on Carter . . .

Anonymous

Pediatrics . . .

Children are not simply micro-adults, but have their own specific problems.
Bela Schick

Here we have a baby. It is composed of a Bald Head and a Pair of Lungs.
Eugene Field

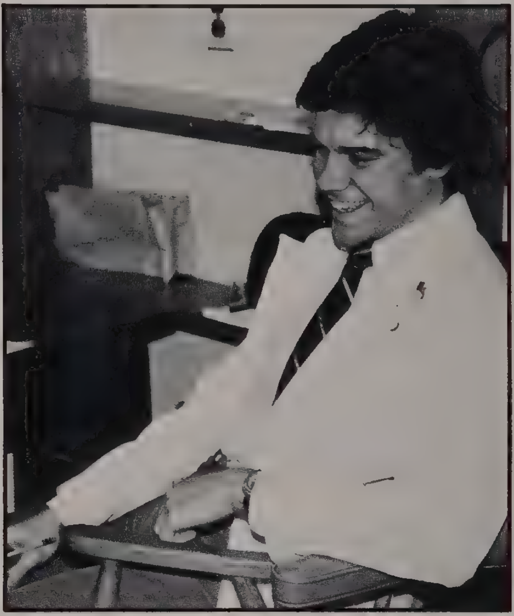
C. Murphy, B. Armstrong, M.D., B. Burge

CLASS of 1982

R. Rowley

Between you and me, I think an infant is disagreeable, — it is all gut and squall.
Charles Brown

You can do anything with children if you only play with them.
Prince Otto von Bismarck


D. Cox

Infants do not cry without some legitimate cause.
Farrarius

C. Seigel, P. Pin

S. Weir, P. Saul

Psychiatry . . .

Perhaps there is nothing in Nature more pleasing than the study of the human mind, even in its imperfections or depravities.

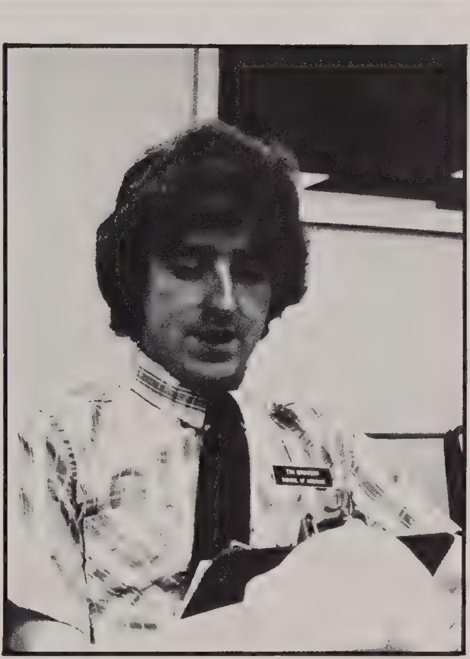
John Hunter

CLASS of 1982

W. Woodruff, B. McCarley

A neurotic is the man who builds a castle in the air. A psychotic is the man who lives in it. And a psychiatrist is the man who collects the rent.

Lord Robert Webb-Johnstone



T. Browder

C. Campbell

Yes, this is definitely a multi-dimensional personality disorder with elements of schizo-affective schizophrenia and depressive neurosis overlay.

Anonymous

B. Kopitsky, A. Carlson, R. Mainwaring, G. Maier

Surgery . . .

As art, surgery is incomparable in the beauty of its medium, in the supreme mastery required for its accomplishment, and in the issues of life, suffering, and death which it so powerfully controls.

Sir Berkeley Moynihan

When in doubt, drain.

Robert Lawson Tait

J. McVicar

In surgery, eyes first and most; fingers next and little; tongue last and least.

Sir George Murray Humphry

Yes, Sir Humphry, that's exactly right.

Anonymous

CLASS of 1982

Surgery is the ready motion of steady and experienced hands.

Galen

The only weapon with which the unconscious patient can immediately retaliate upon the incompetent surgeon is hemorrhage.

William Stewart Halsted

R. White, Rover

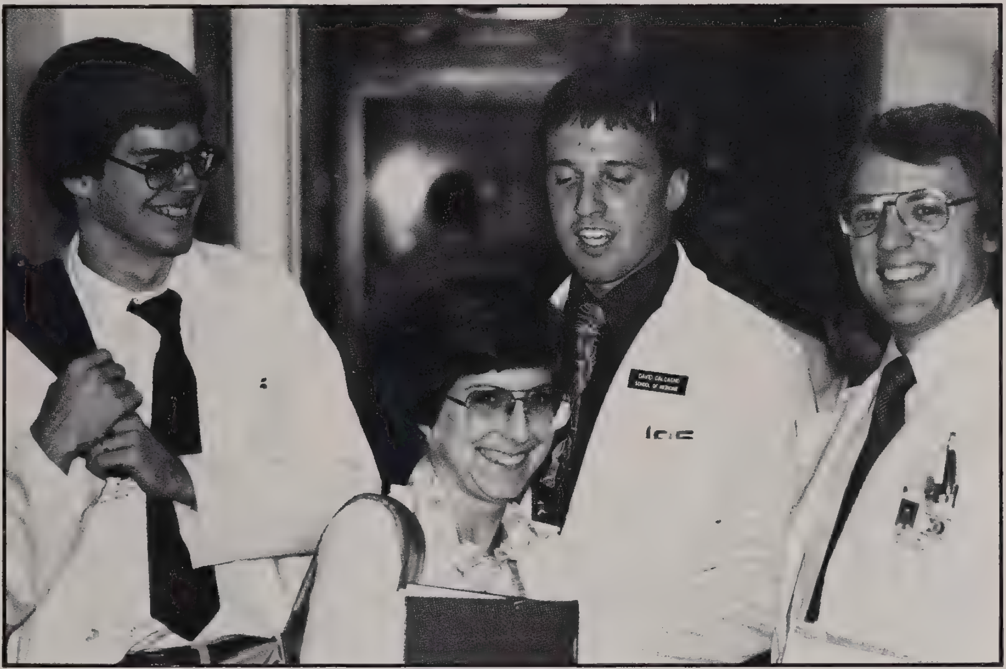
Richard Ackerman
Furman College
Sumter, SC

Donna Anderson
William & Mary
Lumberton, NC

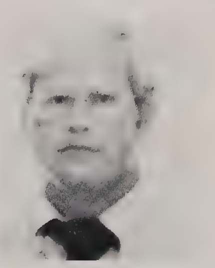
Doug Anthony
Washington Univ.
Hermitage, MO

Mike Austin
Emory Univ.
Chamblee, GA

J. Martin, M. Austin, C. Campbell, T. Crump

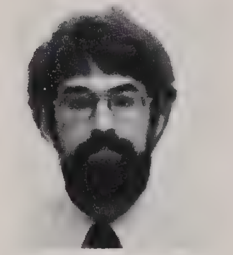


D. Worms, C. Bounous, D. Calcagno, B. Kinney



Graham Barden
Duke Univ.
New Bern, NC

Ed Bell
Duke Univ.
New Bern, NC



Greg Bertics
Duke Univ.
East Brunswick, NJ

Tim Bishop
Rice Univ.
Las Cruces, NM

CLASS of 1982

Jim Blatchford
Duke Univ.
Newton Square, PA

Robin Bledsoe
Mississippi
Greenville, MS

Chris Bounous
Duke Univ.
Durham, NC

Margaret A. Bowring
Wellesley College
Durham, NH

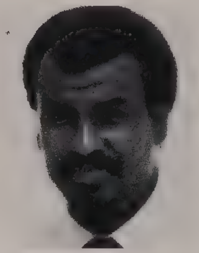
J. Halverson, P. Zeitler, G. Michael

Walter Broadhead
Davidson College
Charleston, WV

Tim Browder
Wake Forest Univ.
Charlotte, NC

Paul Browne
North Carolina
Winston-Salem, NC

Diana Bures
Duke Univ.
St. Petersburg, FL

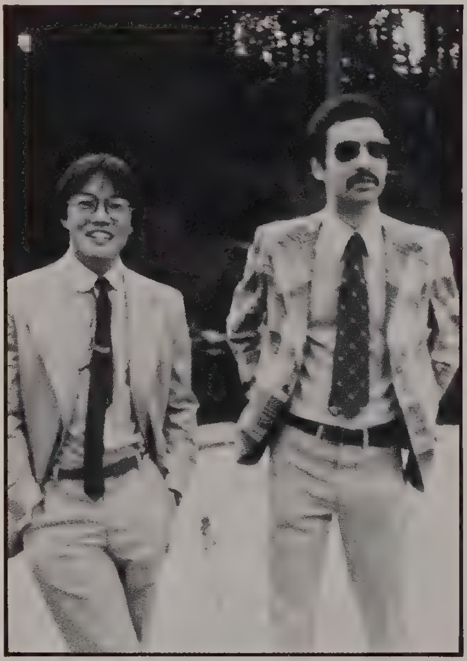


Bill Burge
Paine College
Farmville, NC

Dan Caffrey
Duke Univ.
Greensboro, NC

H. Ellwood

CLASS of 1982



L. Wu, G. Schwartz

Dave Calcagno
Tufts Univ.
Cos Cob, CT

Jim Califf
South Carolina
Columbia, SC

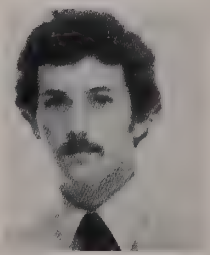
Cyd Campbell
Clark Univ.
St. Petersburg, FL

Becky Campbell
Duke Univ.
Chapel Hill, NC

Bill Cance
Duke Univ.
Asheville, NC

Alan Carlson
Duke Univ.
Newburgh, IN

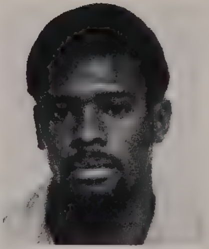
Caroline Chantry
Iowa
Omaha, NE



Tom Christopher
Duke Univ.
Huntington, NY

C. Chantry, L. Coppage

Betsy Clardy
Brown Univ.
Arlington, VA



Carnell Cooper
Yale Univ.
Dillon, SC

Lynn Coppage
Brown Univ.
Madison, CT

Dave Cox
Harvard College
Louisville, KY

Tony Crump
Cornell Univ.
Riverhead, NY

Scott Cunningham
Mass. Inst. of Tech.
Newburgh, NY

Rosier Dedwylder
Virginia
Hamilton, GA

Georgette Dent
Duke Univ.
Raleigh, NC

Damian DiCostanzo
Dartmouth College
Canton, MA

Bill Dodson
Emory Univ.
Atlanta, GA

S. Cunningham

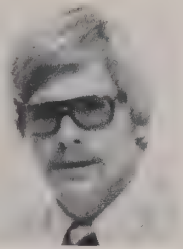
CLASS of 1982

Sam Dove
Duke Univ.
Raleigh, NC

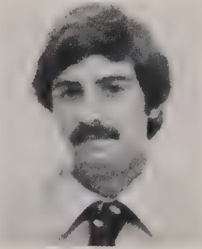
Terry Early
Northeast Missouri
Edina, MO

Hilary Ellwood
North Carolina St.
Raleigh, NC

Sandy Emery
Dartmouth College
Selkirk, NY



Ed Ferren
Davidson College
Haddonfield, NJ



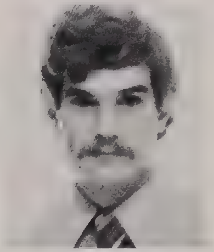
Evan Fram
Cornell Univ.
Aspen, CO

Rich Frothingham
Mass. Inst. of Tech.
Little Rock, AR

Marty Gagliano
Radcliffe College
Belvedere, CA

C. Stewart

J. Warren, T. Browder, L. Wu, D. Anthony, P. Browne



Jim Gibson
California-Davis
San Francisco, CA

Rosey Gilliam
Georgia
Lancaster, SC

Steve Gonias
SUNY-Stony Brook
Brooklyn, NY

Ira Gore
Harvard College
Rochester, NY

Landis Griffeth
Duke Univ.
Greenville, SC

Tom Grote
North Carolina
Charlotte, NC

Jim Gruber
Dartmouth Colleg
Bedford, NY

Katie Gutmann
Wisconsin
Janesville, WI

Andrea Hackel
Swarthmore College
Durham, NC

Jim Halverson
California-LA
Highland, CA

Craig Haug
Duke Univ.
Normandy Beach,
NJ

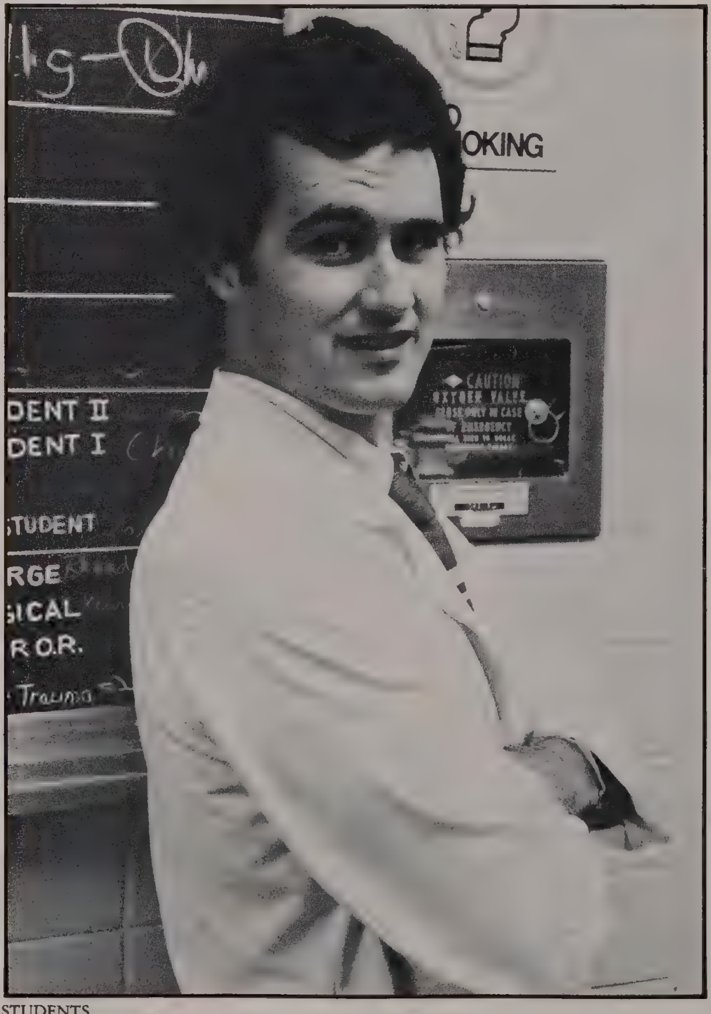
Charles Haworth
Guilford College
High Point, NC

Bill Herzog
Duke Univ.
Ellicot City, MD

J. Califf, A. Shelton

CLASS of 1982

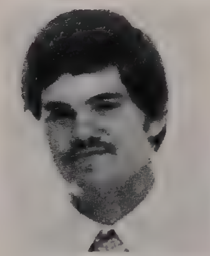
E. Bell



Susan James
Duke Univ.
Durham, NC

Kemp Kernstine
Duke Univ.
Fayetteville, NC

Bob Kinney
Wheaton College
Elgin, IL



Greg Kirschner
Northwestern Univ.
North East, PA

Fran Koehler
Michigan
Northville, MI

Deborah Kondis
Cornell Univ.
Munhall, PA

Bob Kopitsky
Emory Univ.
St. Louis, MO

Ken Lazarus
Mass. Inst. of Tech.
Miami Beach, FL

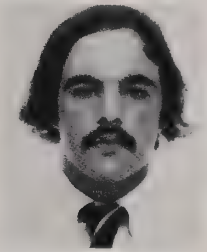
Lu Ann Leidy
Virginia
Lansdale. PA

S. Morgello

Steve Levine
California-SD
Northridge, CA

Kapauner Lewis
South Carolina
Columbia, SC

Jim Lingle
North Carolina
Charlotte, NC

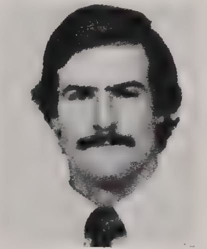


Gary Lourie
Duke Univ.
Syracuse, NY

Grace McCall
North Carolina St.
Marion, NC

Betsy McCarley
Kansas
Dallas, TX

Keith McCrae
Dartmouth College
Cumberland
Foreside, ME



John McVicar
Wesleyan Univ.
Broomfield, CO

George Maier
Loyola College
Baltimore, MD

CLASS of 1982

Rick Mainwaring
Duke Univ.
Center Valley, PA

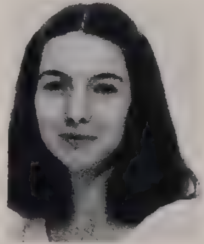
Joe Martin
Howard Univ.
Durham, NC

Gina Michael
Missouri
St. Louis, MO

Tim Miller
Dartmouth College
Racine, WI

Sam Mitchener
Davidson College
Laurinburg, NC

Kate Montague
Randolph-Macon
Virginia Beach, VA



Susan Morgello
Mass. Inst. of Tech.
Bronx, NY

Chuck Murphy
Loyola Univ.
Atlanta, GA

Peggy Nile
Union College
Oneonta, NY

S. Ornstein, S. Spitz

A. Ormsby

Lynn Oligino
Connecticut
Danbury, CT

Alice Ormsby
Stanford Univ.
Milwaukie, OR

Steve Ornstein
Dartmouth College
Wantagh, NY

Susie Page
Duke Univ.
Raleigh, NC

Doug Paull
Duke Univ.
Dayton, OH

Paul Pin
Duke Univ.
College Park, MD

Rosanne Pollack
Yale Univ.
Dayton, OH

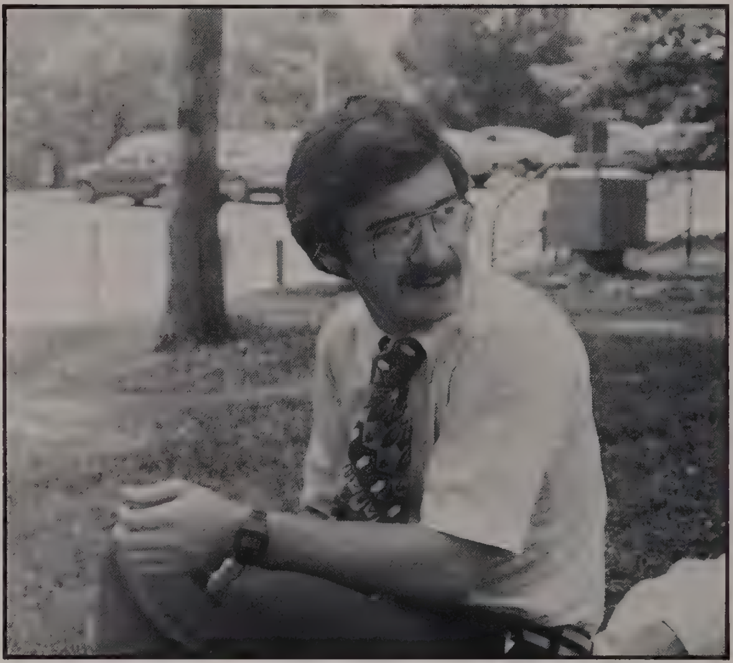
Julie Price
Duke Univ.
Woburn, MA

Matt Ralston
Dartmouth College
Clarksdale, NJ

Rich Rowley
Harvard College
Albany, NY

Dale Russell
Duke Univ.
Durham, NC

Bob Sasso
Seton Hall College
Harrison, NJ



E. Fram

CLASS of 1982

J. Lingle

Phil Saul
Duke Univ.
Atlanta, GA

Leslie Schultz
Duke Univ.
Brielle, NJ

Mike Schwartz
Duke Univ.
Charleston, WV

Paul Shekelle
Illinois
Oak Park, IL

Alan Shelton
North Carolina
Burlington, NC

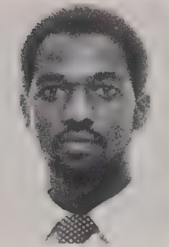
Carol Seigel
Mass. Inst. of Tech.
Williamsburg, VA

K. Montague, J. Warren

Jack Smith
North Carolina
Raleigh, NC

Susan Spitz
Radcliffe College
Plainview, NY

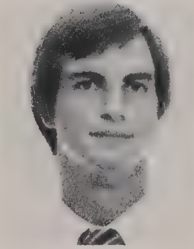
Cathy Stewart
California-LA
Santa Monica, CA


Vernon Stringer
North Carolina St.
Concord, NC

Mark Susskind
Duke Univ.
Fairmont, WV

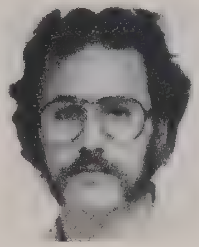
Meg Tarpey
California-Riverside
San Francisco, CA

Joyce Tibbetts
Florida
Jacksonville, FL


Pat Vogel
Duke Univ.
Durham, NC

Lisa Walden
Dartmouth
South Orange, NJ

Jeff Warren
Yale Univ.
Salisbury, NC


Bruce Watson
Duke Univ.
Glen Ridge, NJ

Sam Weir
Davidson College
Charlotte, NC

S. Page

CLASS of 1982

Rick White
Hamilton College
Burnt Hills, NY

Scott Williams
Swarthmore College
Syracuse, NY

Woody Woodruff
North Carolina
Lexington, NC

Dave Worms
Stanford Univ.
Excelsoir, MN

Larry Wu
Williams College
Rochester, NY

Phil Zeitler
Amherst College
Malden, MA

G. Maier

B. Campbell

CLASS of
1982 . . .

C. Bounous

CLASS of 1983

Attention — Students of
ESP — YOGA — PSYCHIC SCIENCES — MYSTICISM
— ASTROLOGY
Help — Teach — Counsel — Lecture Others
"BECOME A DOCTOR OF MEDICINE"

NEW . . . ALL HOME-STUDY PROGRAM . . . NO PREVIOUS COLLEGE NECESSARY. At last, a legitimate Doctoral Degree Program in Medicine (not a diploma mill) for anyone seeking to find the fulfillment that comes from a professional career helping others to help themselves through medical means whether full time or in your spare time to start — through our Doctoral Home-Study Program. We, the University of Duque in Durham, have prepared an extensive and detailed Research Report entitled, "A Doctoral Career in Medicine," which we would like to send you for $5,000.00. It allows you to properly evaluate the entire field of Medicine as it exists today, including opportunities available, realistic earnings that can be expected, operating legalities — everything. Included are full details on how you may enter our Doctoral Degree Program should you wish to do so after reviewing and evaluating the report. Tuition is quite affordable.

Excerpts from Unsolicited Student Letters

"I cannot be strong enough in my praise of the handouts I have gotten." C.T.L., Shaker Heights, OH

"The way in which lectures are presented is positive and direct." T.B.S., Flourtown, PA

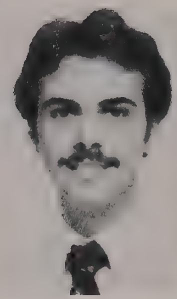
"I do like your course of study. I believe it is one of the finest I've had." P.N.D., Partridge, KS

"Thank you for the course. I'm very happy with it." B.P.H., Pinetops, NC

Send check or money order (no cash or stamps, please) to:
University of Duque, Doctoral Dept. 7, Durham, NC 27710

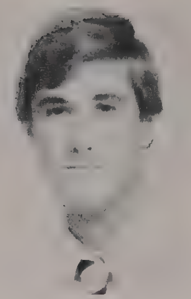
Persons residing west of the Mississippi or north of the Mason-Dixon line add 6% sales tax.

David H. Adams
Duke
Greensboro, NC



Danny F. Andrews
Duke
Mount Olive, NC

Joseph W. Baker
Duke
Frederick, MD



Eric B. Bass
Duke
Shaker Heights, OH

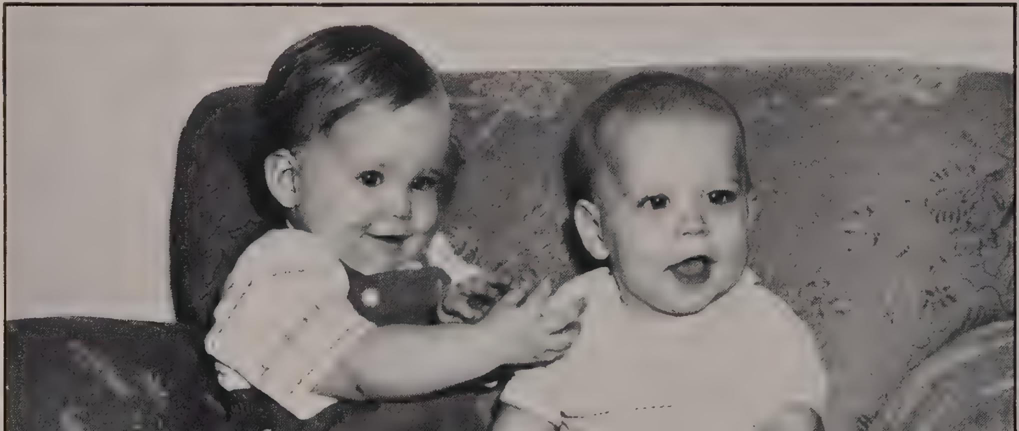
Linda G. Baum
Stanford
Shaker Heights, OH

David C. Beard
Davidson
York, SC

M. Morse thinks deep thoughts in the Medical Center Amphitheater.

Estrada J. Bernard
Morehouse
Monrovia, Liberia

James E. Boatman
Southern California
Claremont, CA



M. Richardson and W. Hambright hear the results of their APGAR tests.

Robert G. Brame
UNC-Chapel Hill
Greenville, NC

Terry E. Brennan
Harvard
Munster, IN

CLASS OF 1983

From Zen, some men learn eternal peace.

R. McIntyre Bridges
Texas Christian
Minden, LA

Tracey M. Brown
Swarthmore
Summit, NJ

William C. Buhrman
Duke
Richmond, VA

John B. Buse
Dartmouth
Charleston, SC

Wendell D. Butler
Duke
Charlotte, NC

Christian T. Campos
Dartmouth
Worcester, MA

Allen R.S. Chen
Dartmouth
Lexington, MA

McKinley Cheshire
UC at San Diego
West Palm Beach, FL

Thomas F. Collier
Cornell
Closter, NJ

D. DiCostanzo, C. Campos, S. Stevens, D. Quinn, P. Shekelle

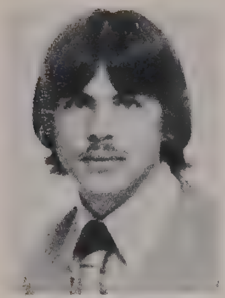
H. Willy Chu
Duke
Raleigh, NC

Michael R. Cooper
Duke
Winston-Salem, NC

K. Sheerin, M. Richardson, and A. Mitchell search for Bourgery's ligament.

Ann T. Corsa
Brown
Farmingdale, NY

Kenneth L. Crutcher
Georgia
Atlanta, GA


Robin G. Cummings
UNC-Chapel Hill
Pembroke, NC

Peter H. Custis
Northwestern
Potomac, MD

Harry J. D'Agostino
Harvard
Menands, NY

David W. Deaton
Davidson
Valdese, NC

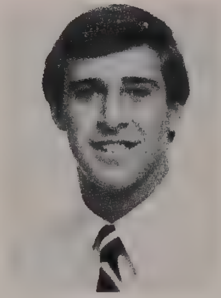
Bart L. Dolmatch
Michigan
Peekskill, NY

Almond J. Drake
U.S. Naval Academy
Pinetops, NC

Ann H. Farrar
UNC-Chapel Hill
Norlina, NC

Robert P. Fleischer
Duke
Youngstown, OH

L. Susan Frederick
Duke
Rock Hill, SC

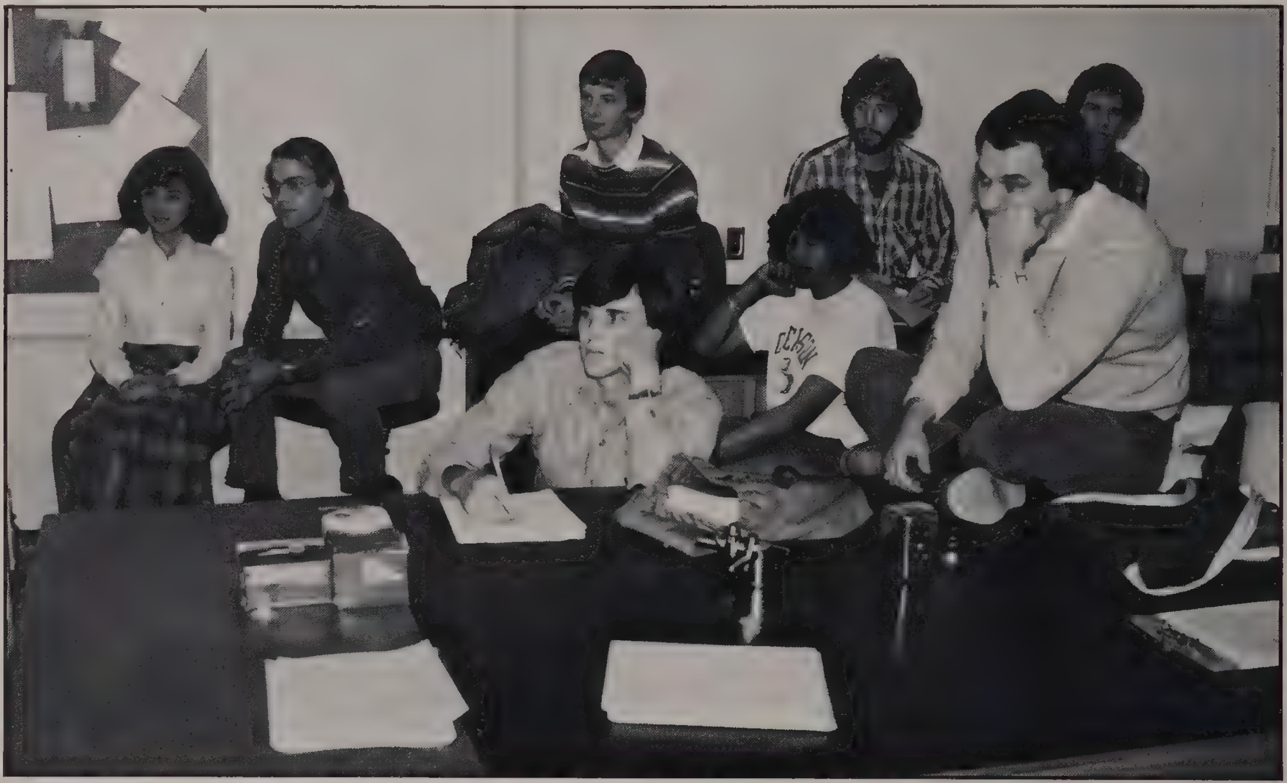

Bruce M. Freedman
Duke
Alexandria, VA

Whitney J. French
Overland
Chapel Hill, NC

Herbert E. Fuchs
UC at Los Angeles
Granada Hills, CA

Thomas G. Fulghum
Wake Forest
Sims, NC

John A. Gallalee
Duke
Mobile, AL


M. Hensley, C. Campos, D. Katz, B. Harland, A. Yancey, B. Dolmatch, B. Buhrman, and S. Stevens breathlessly anticipate yet another discourse on the diagnosis and treatment of kuru.

Gregory S. George
MIT
Bronx, NY

Lisa A. Gichner
Brown
Bethesda, MD

Herbert J. Glatt
Pennsylvania
Carmel, NY

Linda Glaubitz
Cornell
Floral Park, NY

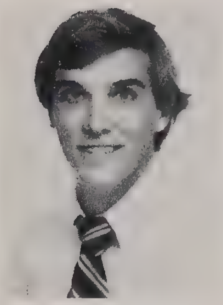
Patrick Gomez
UC at Irvine
San Francisco, CA

William Gottesman
Dartmouth
Scarsdale, NY

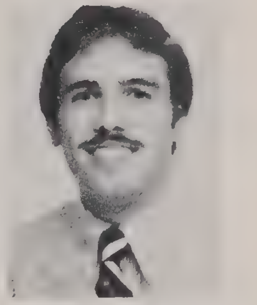
G. George discovers that 2 out of 3 women prefer MD-PhD's.

Gregory G. Hall
Duke
Greensboro, NC

Reginald L. Hall
St. Vincent College
Baltimore, MD

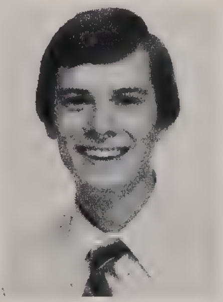


Wesley F. Hambright
Emory
Greensboro, NC



Stephen C. Hamilton
Duke
Pittsburgh, PA

John R. Handy
Georgia
Augusta, GA

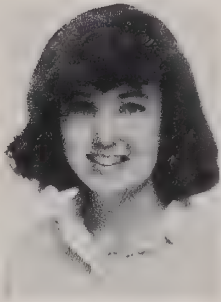


Robert C. Harland
Whitworth
Lake Oswego, OR

William A. Hazel
Princeton
Broad Run, VA

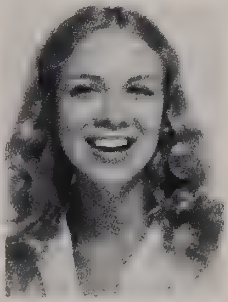
CLASS OF 1983

For dinner, let Beth bring down plump impalas.



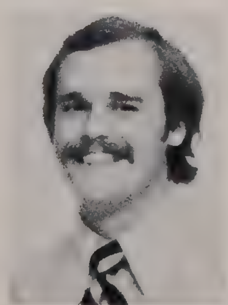
Michele I. Hensley
Duke
Raleigh, NC

Karl B. Hiatt
Arizona State
Mesa, AZ



Karen E. Hinkley
UNC-Chapel Hill
Raleigh, NC

Donald R. Holleman
Arizona
Phoenix, AZ

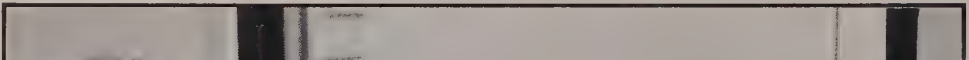


William E. Hooper
UNC-Chapel Hill
Ruxton, MD

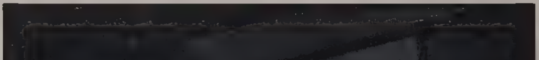
Joan T. Jordan
Duke
Raleigh, NC

Shirley O. and J. Lane discuss recent developments in easy autoclaving at home.

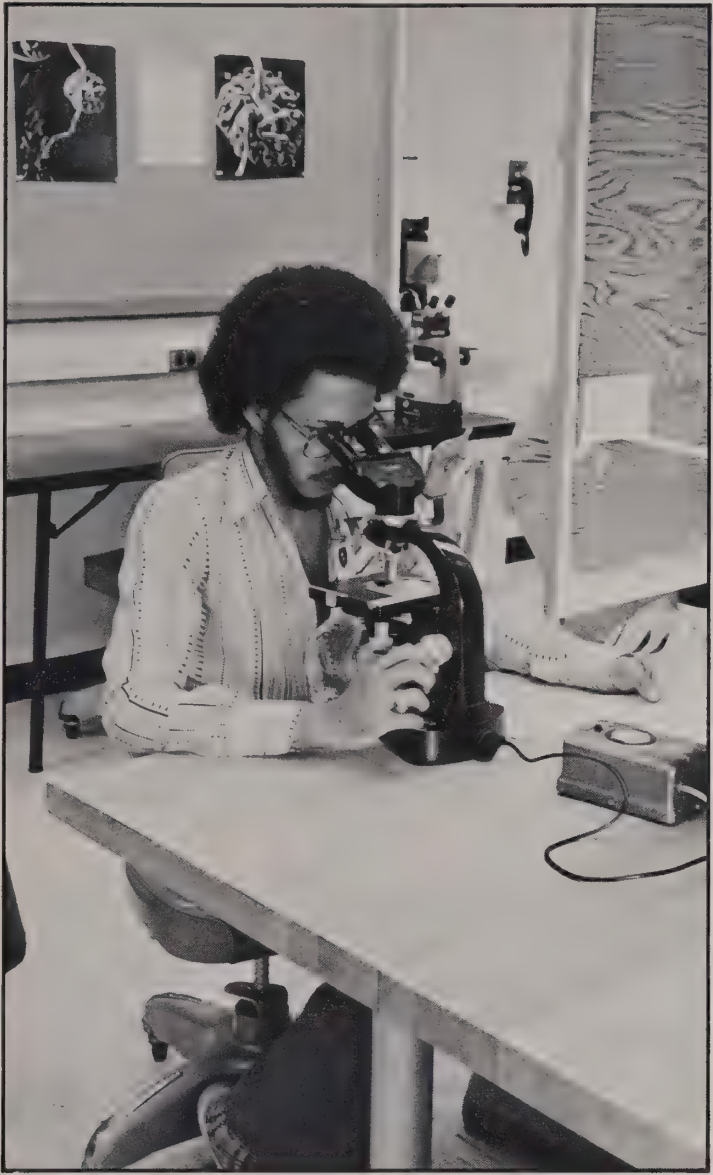
M. Morrison, L. Moore



H. Fuchs, P. Treseler

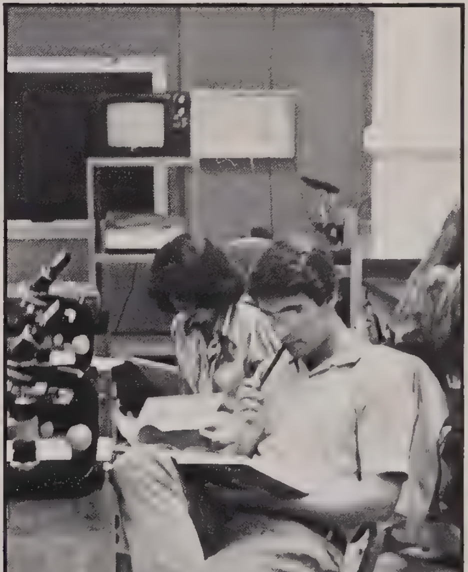


K. Ow. No matter how you shake and dance . . .

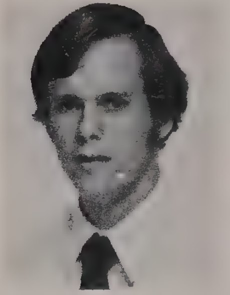

D. Miller

J. Parelman

G. Kay, A. Corsa


M. Hensley, M. Cooper

Paula Kadison
Davidson
Tallahassee, FL



William G. Kaelin
Duke
Fairfield, CT

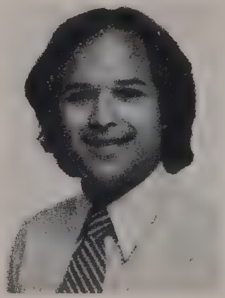
Steven P. Karas
Columbia
Brooklyn, NY

David L. Katz
Duke
Chapel Hill, NC

J. Lease, K. Sheerin. Hey, have you heard this one: Our Old Organ Teacher Tillie . . .

D. "Galloping Gourmet" Robinson prepares one of his specialties.

Gary Kay
Michigan
Northbrook, IL



Ruben Kier
Harvard
Charlotte, NC

CLASS OF 1983

Sam lowered Tilly's pants to touch curly hair.

L. Gichner, H. Glatt

William Kitzmiller
Duke
Cincinnati, OH

Hope E. Knauer
Purdue
Cherry Hill, NJ

Mark S. Komrad
Yale
Coral Gables, FL

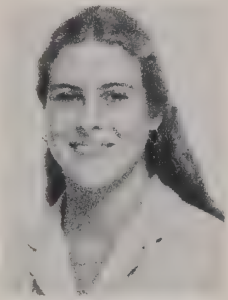
Virginia B. Kraus
Brown
Cleveland, OH

William E. Kraus
Harvard
Akron, OH

Michael G. Kurilla
Cal. Inst. of Tech.
Trenton, NJ

Jan A. Kylstra
Dartmouth
Durham, NC

K. Miller, A. Mitchell, K. Sheerin, and M. Richardson rejoice upon finding Bourgery's ligament.

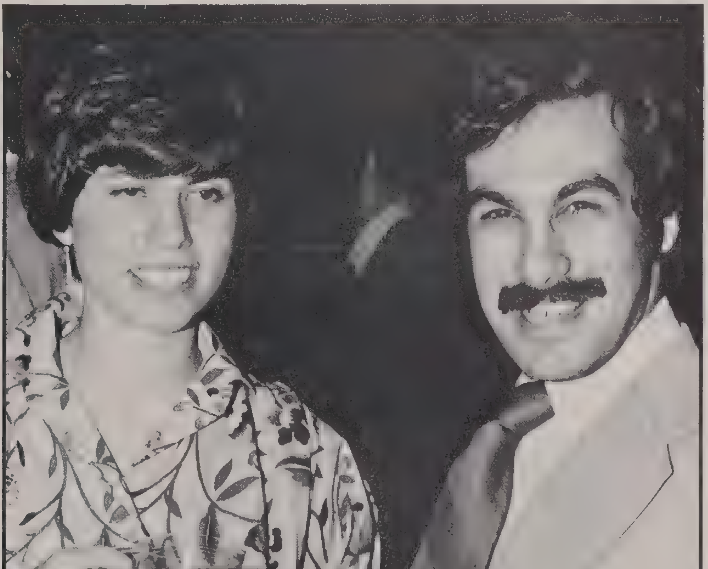


Julia C. Lane
Duke
Pensacola, FL

John G. Lease
NC State
Raleigh, NC

Charles L. Lucore
Colgate
Cheshire, CT

L. Glaubitz



M. Morrison, J. Saltz. Drink Moxie.

D. Katz, B. Gottesman, A. Mitchell, and T. Brennan raise an imaginary toast to absent friends.

J. Marvin McBride
Wofford
Columbia, SC

Francis X. McGowan
Brown
New York, NY

Lawrence Mendelow
Duke
Pittsburgh, PA

Deevid O. Miller
Morehouse
Hodges, SC

Katherine E. Miller
Duke
St. Petersburg, FL

Leon Miller
Sterling
Partridge, KS

Adele Z. Mitchell
Harvard
Denton, TX

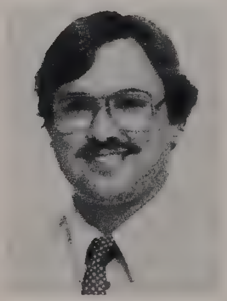
Lucy D. Moore
Georgetown
Littleton, CO

Mary C. Morrison
McGill
Bound Brook, NJ

Dr. Fetter is all smiles as he waits for a first year student to describe his gross pathology specimen.

R. Hazel, B. Hazel. Let's do the Time Warp again!

Martin A. Morse
Duke
Bethesda, MD

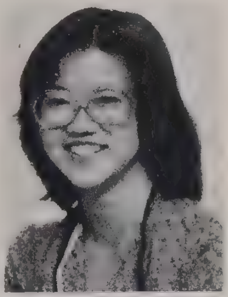

Michael Mumma
Duke
Orefield, PA

Robert L. Murrah
Duke
Conyers, GA

J. Buse, K. Miller, J. Lease. Yes, miss. You can get your very own Krugerrand for only $15 if you act now!

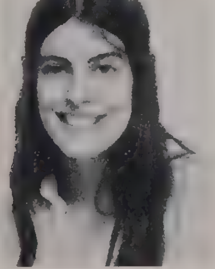
Jan A. Neal
Tennessee
Durham, NC

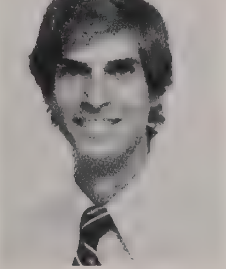
Mindy Oshrain
Brown
Rochester, NY


Cathy L. Ow
UC at Los Angeles
Honolulu, HI

Joseph J. Parelman
Duke
Prairie Village, KS

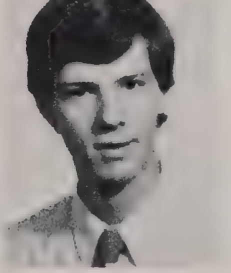
J. Parelman, M. Komrad. My question is this . . .


Etta D. Pisano
Darthmouth
Flourtown, PA


Reuven Porges
Duke
Rishon, Israel

CLASS
OF
1983

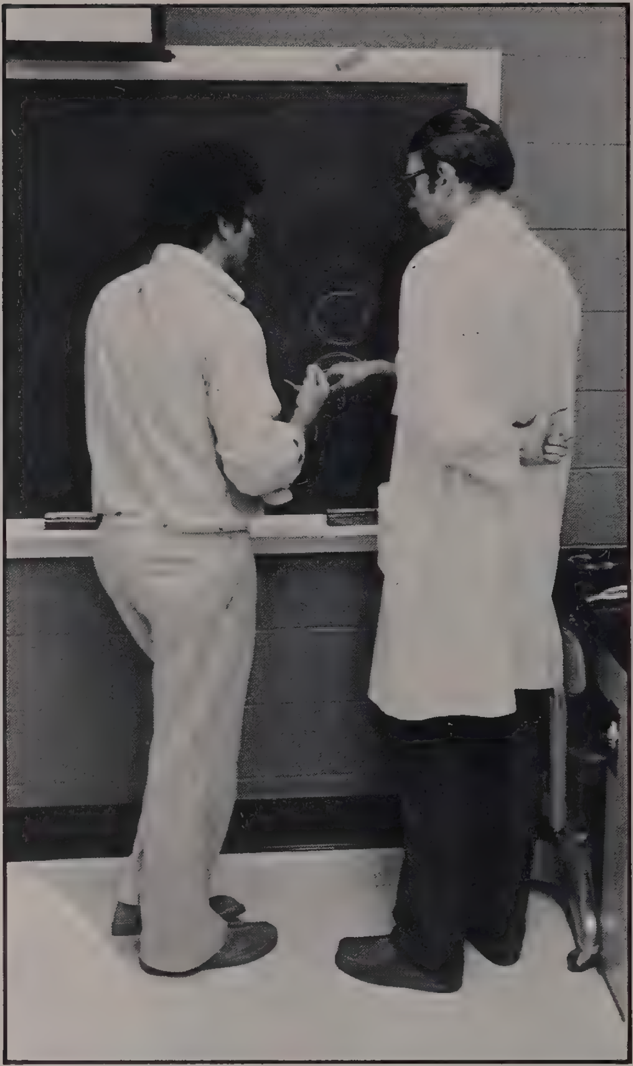
Her date always
left her stranded
during intermission.


David E. Quinn
Amherst
Delmar, NY

Charles E. Rawlings
Duke
St. Louis, MO

Threasa H. Reiman
Duke
Montgomery, AL

H. Fuchs, M. Kurilla. Snoozin' I.



L. Mendelow, K. Lindberg

M. Komrad. Snoozin' II.

L. Gichner, J. Buse

J. Lane

S. Karas, D. Andrews, T. Brennan, L. Gichner, K. Hinkley, A. Chen, H. Glatt

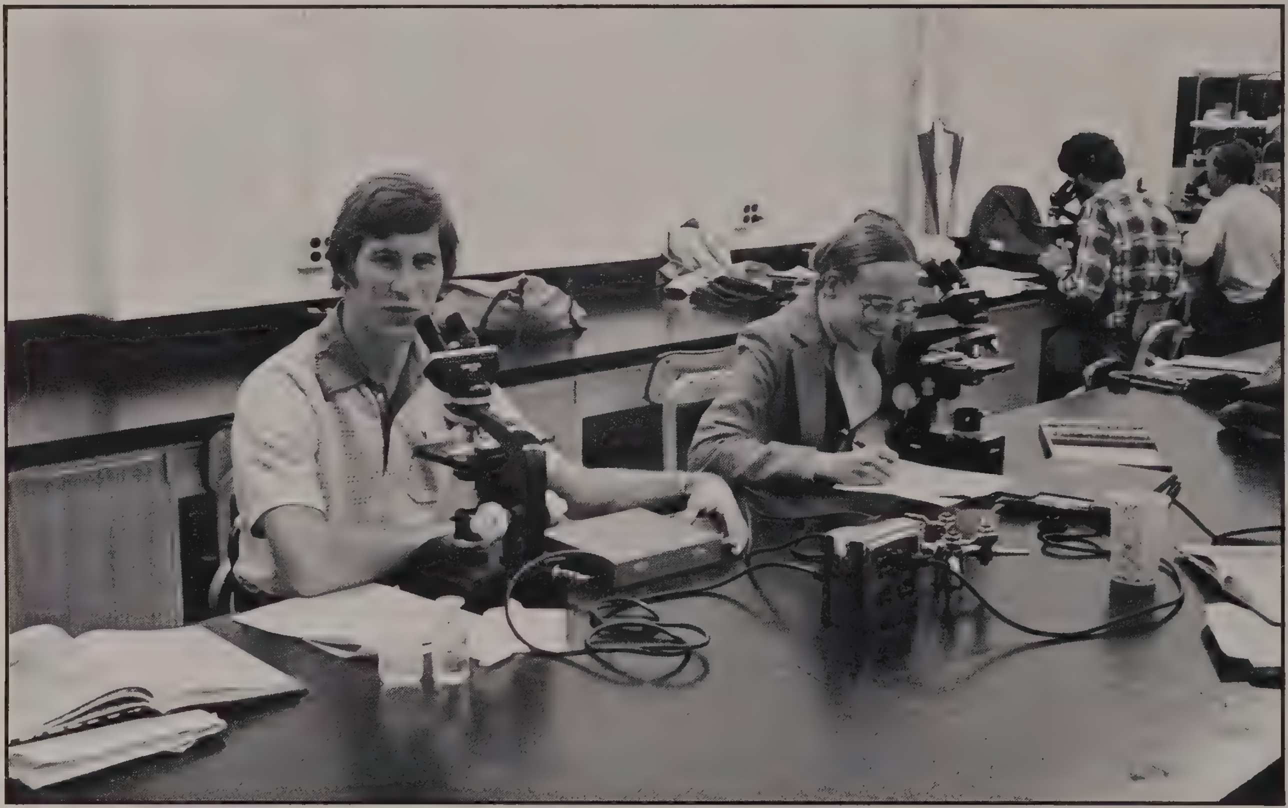
D. and S. Katz

T. Collier, M. Hensley

Mitchell S. Rein
Duke
Livingston, NJ

Margaret Richardson
East Tennessee
Fayetteville, NC

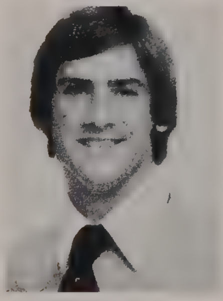
M. Oshrain, R. Ware



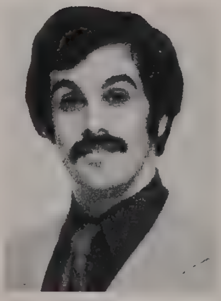
T. Thames, M. Richardson

Kenneth B. Roberts
MIT
Westport, CA

Michelle M. Roberts
Brown
Scarsdale, NY



David Robinson
Duke
Medford, NJ



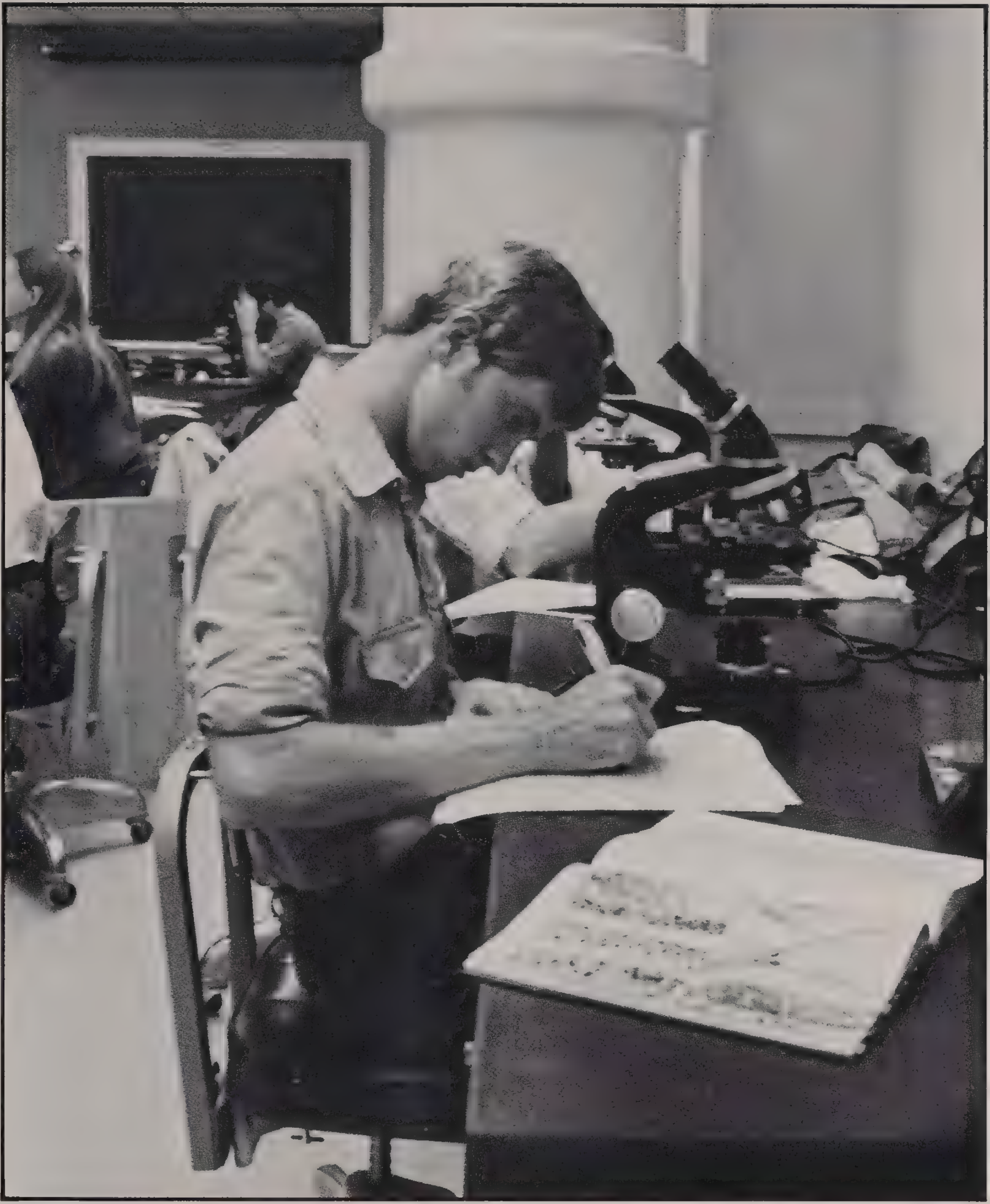
Joel Saltz
Michigan
Detroit, MI

David C. Sane
Wake Forest
Rutherfordton, NC

Richard A. Sarner
Duke
Merrick, NY

Robin L. Schaten
Cornell
Englewood, CO

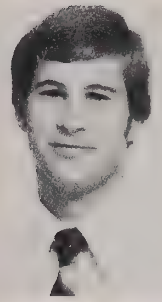
Kathleen A. Sheerin
Mt. Holyoke
New Bedford, MA



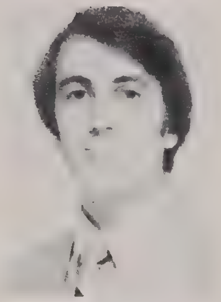
A. Drake

Gregg M. Stave
MIT
Manhasset Hills, NY

Scott D. Stevens
Dartmouth
Lexington, KY



Thomas B. Thames
Duke
Orlando, FL



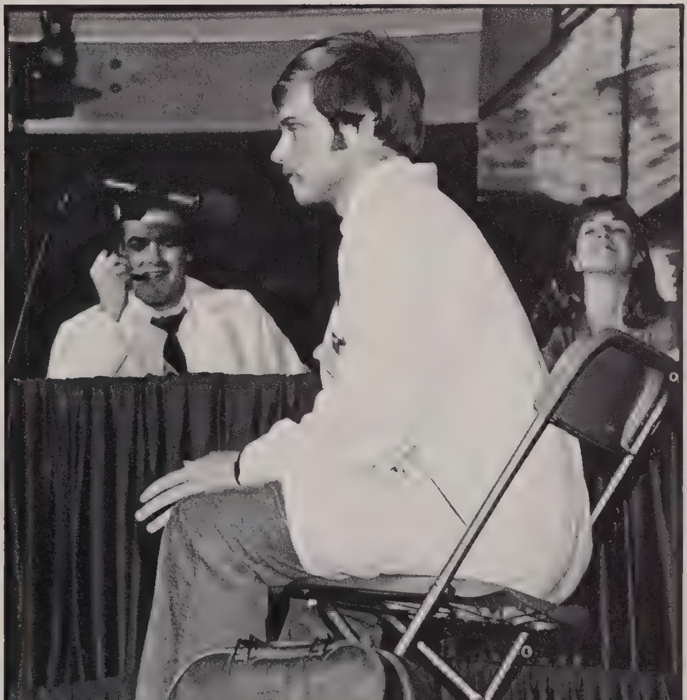
Patrick A. Treseler
Seattle
Seattle, WA

Jonathan N. Tweed
Florida
Ormond Beach, FL

CLASS OF 1983

Chicks in Kentucky should sell fresh mushroom omlets.

J. Buse, G. George, J. Tweed



B. Hazel, W. Butler, J. Neal

K. Hinkley, T. Fulghum, S. Karas, D. Andrews

Stephanie L. Wain
Tufts
Verona, NJ

Russell E. Ware
Furman
Orlando, FL

Joseph S. Weisman
U.S.A.F. Academy
Providence, RI

Grace A. Willett
Bowdoin
Raleigh, NC

Sarah C. Williams
Duke
Newport News, VA

Stacey A. Wood
UNC-Chapel Hill
Wilson, NC

Antronette Yancey
Northwestern
Kansas City, KS

CLASS OF 1983

His Excellency groaned in Queen Elizabeth's court.

M. Morse, P. Treseler, et. al. enjoy the Student Faculty Show.

Francis N. Furter
Transylvania Tech.
Transsexual, TA

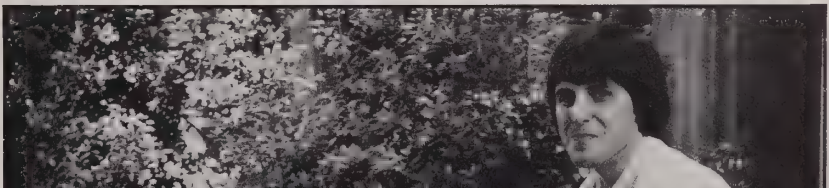
Valerie Krieger
Pine Manor
Kanesboro, NC

E. Reiman, T. Reiman

B. Dolmatch

B. Gottesman, T. Brennan

B. Gottesman, T. Brennan

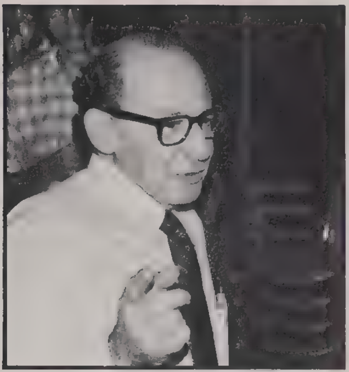


M. Roberts, A. Yancey, D. Katz

L. Miller, R. Schaten, A. Corsa

D. Anthony and D. Steege

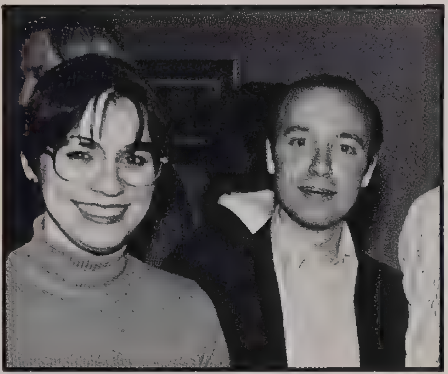
M. Rabkin


Dr. H. Kamin

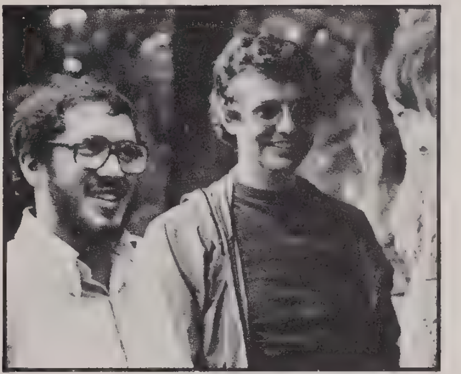
M. Imber

Dr. A. Tatum

M. Johnson and B. Hainline


K. Ney and S. Schiff

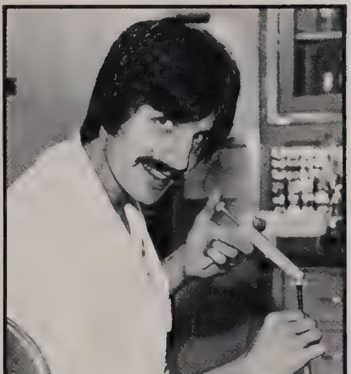
MEDICAL SCIENTIST TRAINING PROGRAM

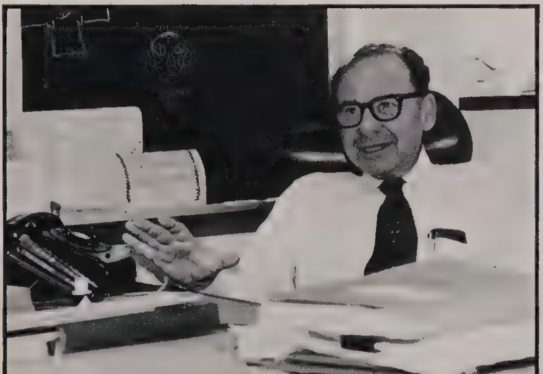

M. Rabkin and Dr. M. Reedy

T. Michel

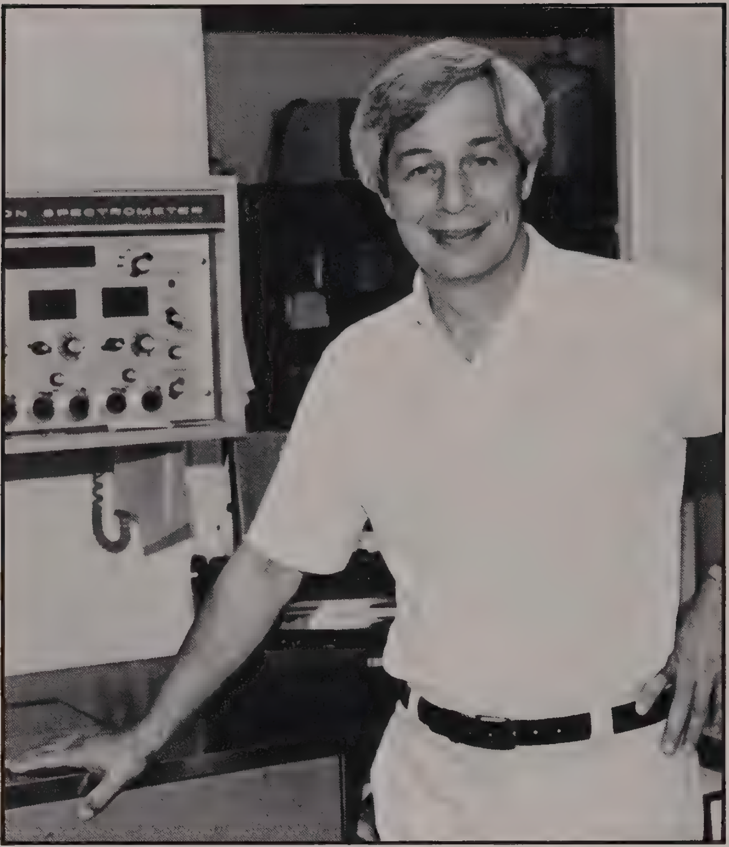
M. Johnson

D. Howell

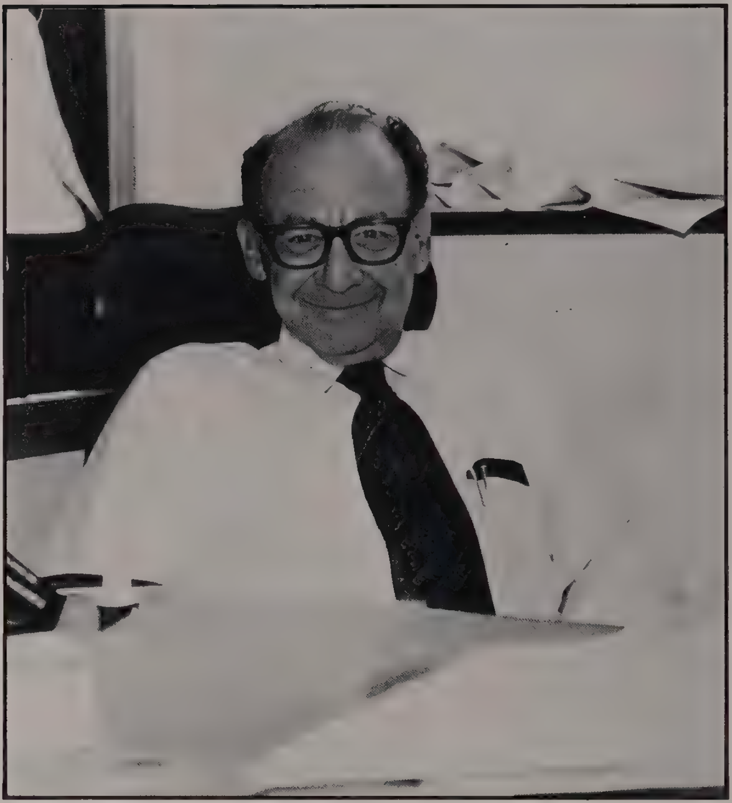

J. Walsh


Dr. H. Kamin

Dr. B. Stein and Dr. R. Edgar



Dr. Robert L. Hill — MSTP Director



Dr. Henry Kamin — Associate Director

MEDICAL SCIENTIST TRAINING PROGRAM

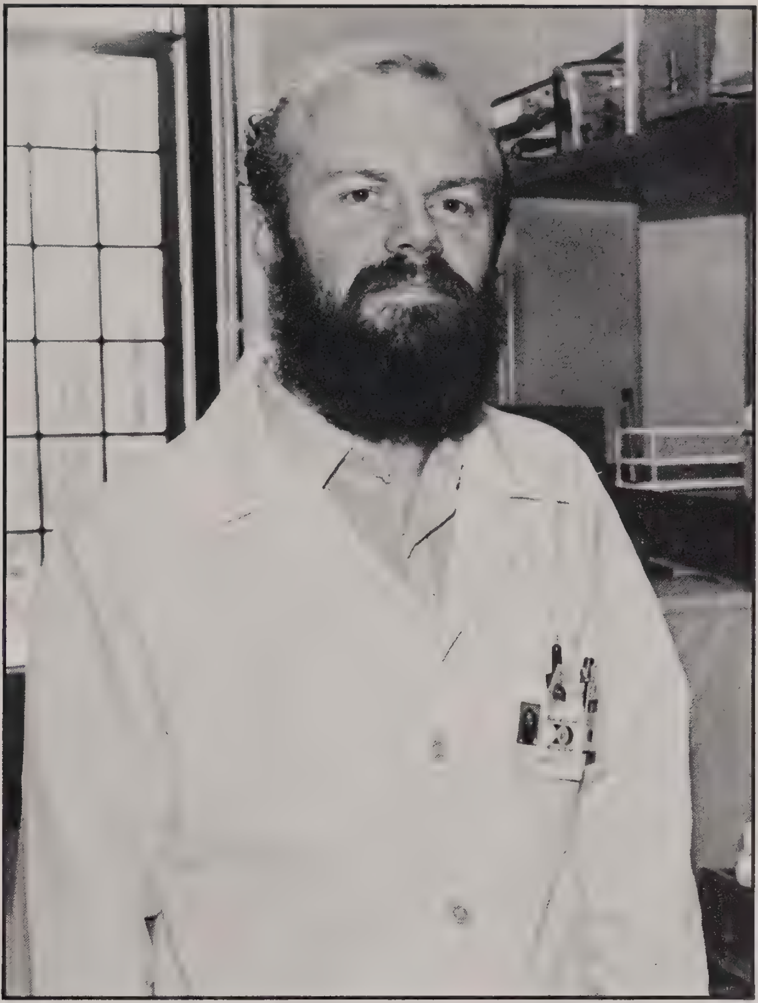
S. Schiff

The Medical Scientist Training Program (MSTP) seeks to prepare its trainees for careers in academic medicine and basic medical research. In addition to the M.D., MSTP students complete all of the requirements for a Ph.D. in one of the basic sciences related to medicine. Under the auspices of the Program students are currently pursuing Ph.D. degrees in Anatomy, Biochemistry, Immunology, Microbiology, Pathology, Pharmacology, and Physiology.

The Medical Scientist Training Program was organized in 1966 drawing its first classes from students enrolled in the School of Medicine. Eight students each year are now admitted directly out of college and others enter after the second year of Medical School. All MSTP students complete the first two years of Medical School before entering Graduate School in their chosen disciplines. The last year of Medical School is taken after completion of all the requirements for a Ph.D., including original research sufficient for the writing and defense of a dissertation. The vast majority of the Program's graduates go on to complete an internship and residency in one of the clinical sciences. Two-thirds of the MSTP graduates who have completed their post-graduate training now hold faculty level positions at medical schools or the National Institutes of Health. The majority of the remaining third are engaged in academic medicine or basic research at other institutions. During the past year six students graduated from the Medical Scientist Training Program. They are: Michael F. Johnston, James W. Larrick, Gary J. Roloson, Peter J. Sims, Kenneth F. Trofatter, and Robert E. Ziegler.

MSTP students in the first two years of Medical School include Douglas C. Anthony, Linda G. Baum, John B. Buse, Caroline J. Chantry, Allen R.-S. Chen, Herbert E. Fuchs, Gregory S. George, James Gibson, Steve L. Gonias, Landis K. Griffeth, Michael G. Kurilla, Kenneth Lazarus, David R. Piwinca-Worms, Joel Saltz, and Patrick A. Treseler. They are pictured with their respective Medical School classes.

Dr. David T. Durack — MSTP spring seminar speaker



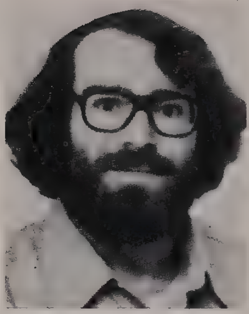
Dr. Doyle Graham — MSTP graduate

Dr. Sal Pizzo — MSTP graduate

Dr. Joe Corless — MSTP graduate

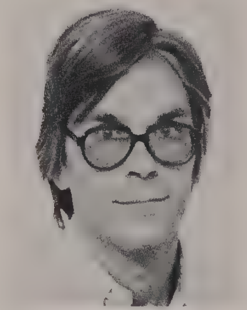
John L. Abernathy
Duke
Charlotte, NC
Biochemistry

Marsha G. Adams
Duke
Malvern, PA
Biochemistry



Stuart R. Adler
Harvard
Statesville, NC
Biochemistry

Scott J. Anderson
California at S.D.
Long Beach, CA
Immunology



Dale L. Blazey
Colgate
Pittsford, NY
Microbiology

Kim Boekelheide
Harvard
Chico, CA
Pathology

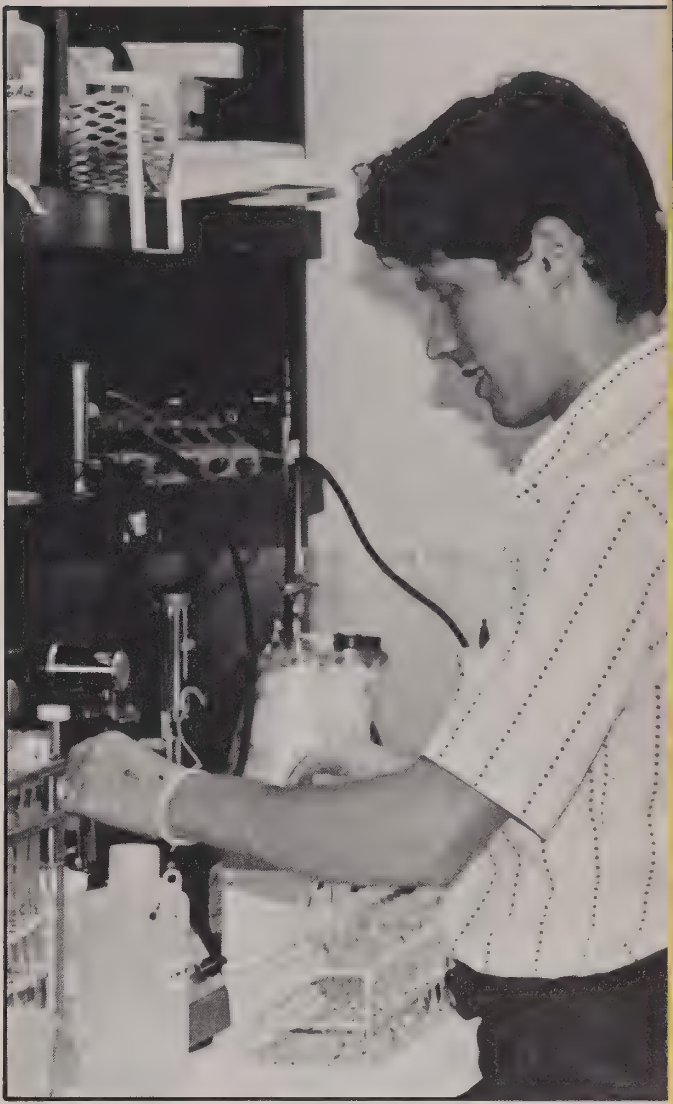
M. Adams

MEDICAL SCIENTIST TRAINING PROGRAM

S. Adler

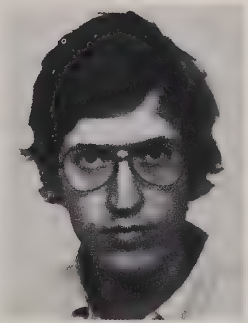
S. Anderson

S. Gospe



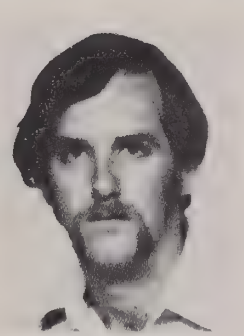
J. Crawford

J. Germino



David J. Browning
Harvard
Huntsville, AL
Pharmacology

James M. Crawford
Dartmouth
Fairfield, CT
Physiology



Michael Dresser
Duke
Davidson, NC
Anatomy

Lisa Ebihara
Northwestern
Wilmette, IL
Physiology

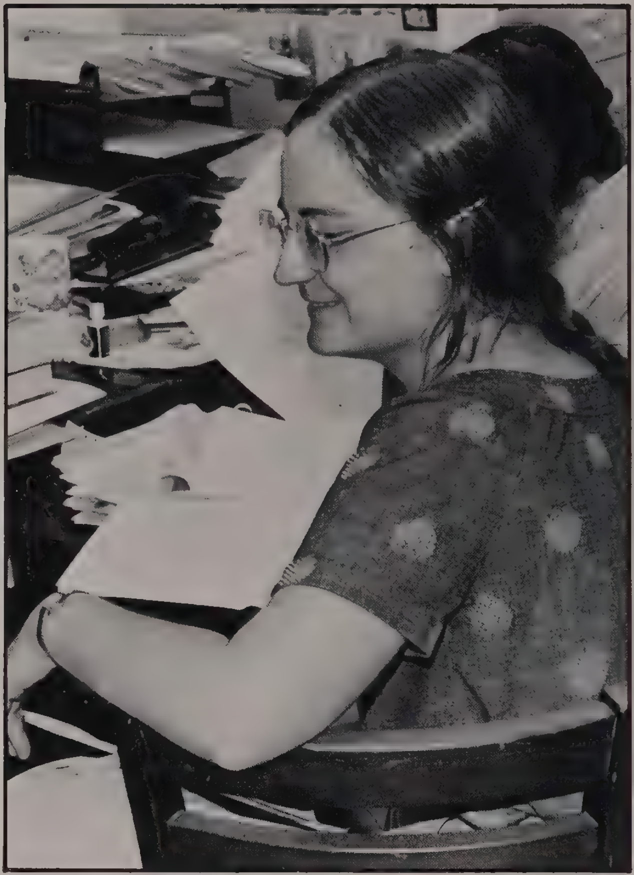
Joseph Germino
Holy Cross
Palos Park, IL
Microbiology

Sidney M. Gospe Jr.
Stanford
San Francisco, CA
Pharmacology

Mark Haas
Duke
Floral Park, NY
Physiology

Bryan E. Hainline
Georgia Tech
Atlanta, GA
Biochemistry

Stuart I. Harris
Duke
Miami, FL
Physiology



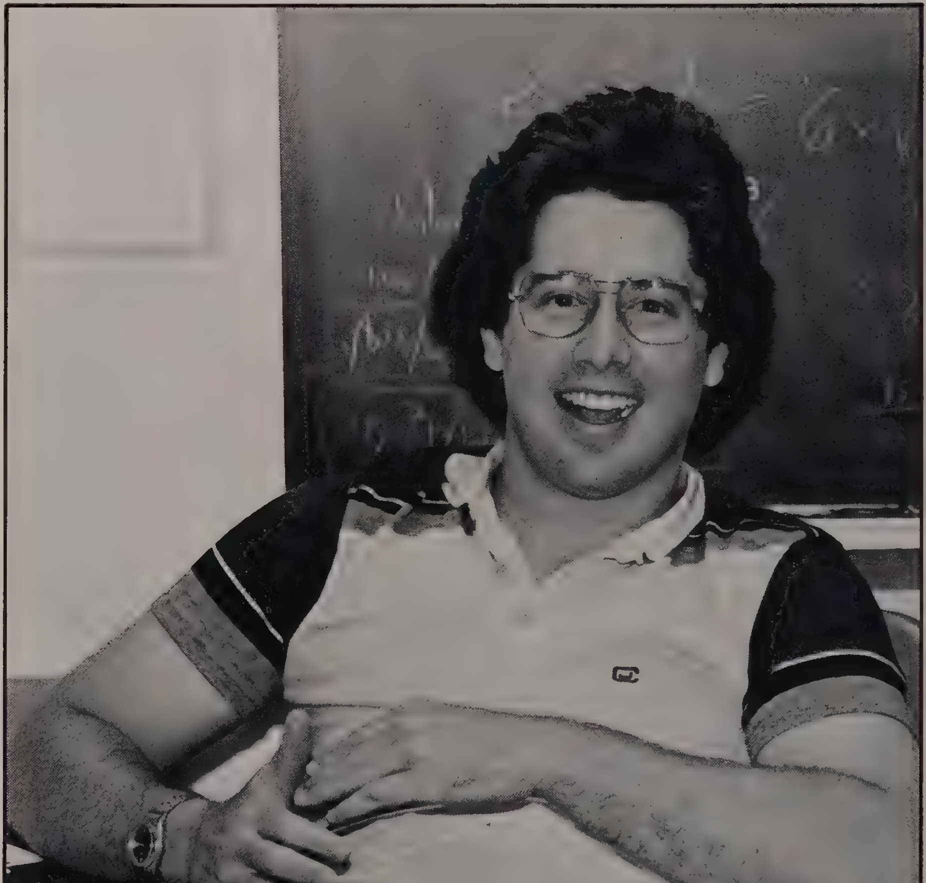
P. Honeycutt

Gail E. Herman
Smith
White Plains, NY
Biochemistry

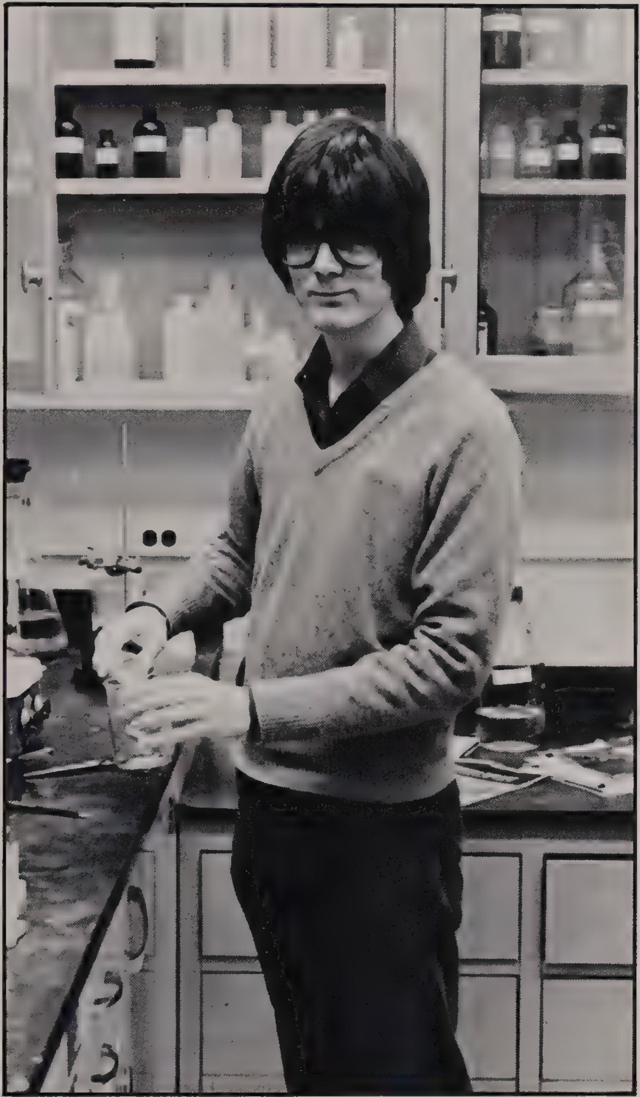
Pamela J. Honeycutt
Mississippi
Jackson, MS
Immunology

David N. Howell
Duke
Greenville, NC
Immunology

B. Hainline



S. Harris



M. Imber

G. Herman

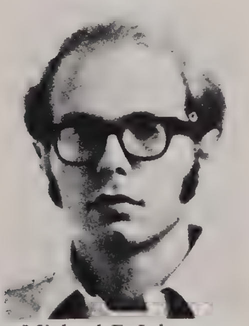
MEDICAL SCIENTIST TRAINING PROGRAM

Claude L. Hughes Jr.
East Carolina
New Bern, NC
Anatomy

Michael J. Imber
Northwestern
Chicago, IL
Biochemistry

Peter A. Janick
Cornell
West Lafayette, IN
Biochemistry

Michael E. Johnson
Brigham Young
Mesa, AZ
Biochemistry

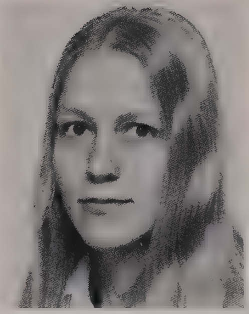


Michael F. Johnston
Georgia
Athens, GA
Physiology

James W. Larrick
Colorado
Englewood, CO
Immunology

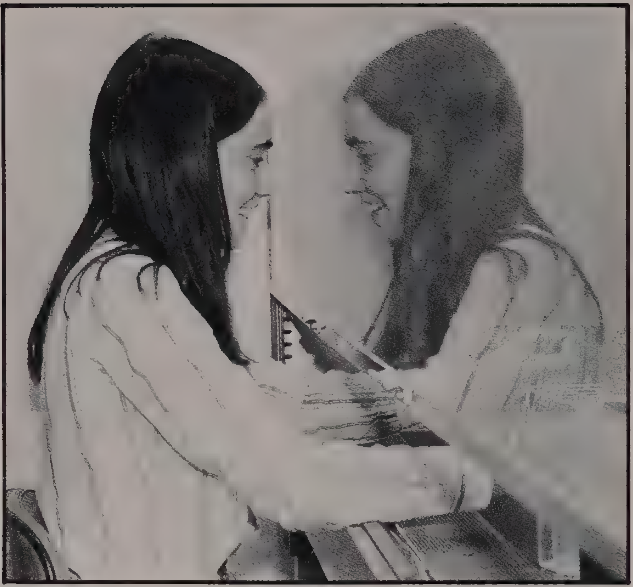
M. Johnson

James T. C. Li
Princeton
Jamaica, NY
Immunology

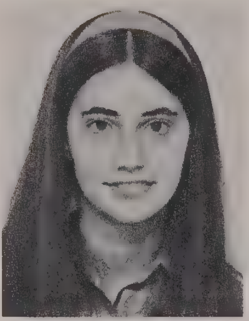


Virginia Ann Lightner
MIT
Atlanta, GA
Biochemistry

Mark R. Ling
Harvard
Merion, PA
Immunology



L. Markert



Mary Louise Markert
Smith
Ogdensburg, NY
Immunology

Thomas M. Michel
Harvard
Cranston, RI
Biochemistry

Kathryn A. Ney
Pittsburgh
Pittsburgh, PA
Biochemistry

MEDICAL SCIENTIST TRAINING PROGRAM

T. Michel

K. Ney

S. Schiff

V. Lightner

Richard A. Olson
Minnesota
Canby, MN
Anatomy

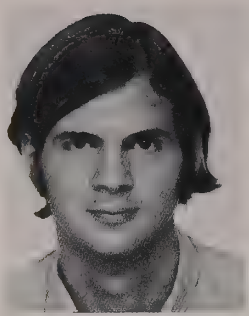
Caroline L. Peterson
Minnesota
Bloomington, MN
Physiology

Michael S. Rabkin
MIT
Holyoke, MA
Physiology

Gary J. Roloson
California at S.D.
San Gabriel, CA
Microbiology

Reinhardt O. Sahmel
Princeton
Staten Island, NY
Pathology

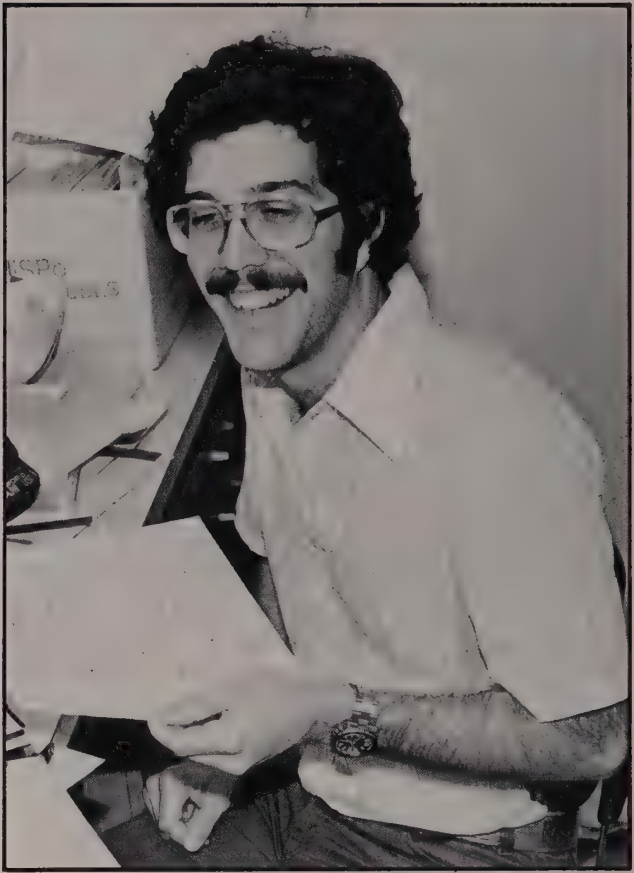
Steven J. Schiff
MIT
Liberty, NY
Physiology



Emmett V. Schmidt
Harvard
Elmsford, NY
Microbiology

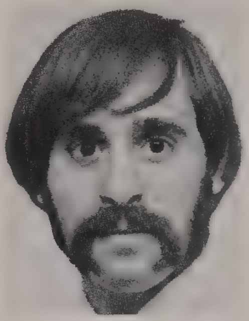
Gregory G. Schwartz
Brown
Jackson Heights, NY
Physiology

Peter J. Sims
Amherst
New Rochelle, NY
Physiology

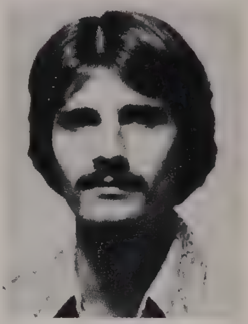


J. Small

James M. Small
Colorado
Englewood, CO
Microbiology



Kenneth F. Trofatter
Duke
Bound Brook, NJ
Pathology



James P. Walsh
Mississippi State
Montgomery, AL
Biochemistry

MEDICAL SCIENTIST TRAINING PROGRAM

J. Walsh

B. Yen

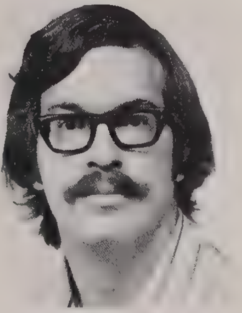
G. Schwartz

T. Michel

D. Wheeler

David M. Wheeler
Duke
Baltimore, MD
Physiology

Catherine L. Wood
Macalester
Rochester, MN
Physiology


Tien-Sze Ben Yen
Stanford
Palo Alto, CA
Biochemistry

Robert E. Ziegler
Colorado
College Park, GA
Immunology

COMBINED DEGREES

In addition to the Doctor of Medicine, Duke provides select students the opportunity to obtain a second degree under any of a variety of programs. Medical students pursuing a second degree other than a Ph.D. include: Walter Broadhead, M.P.H.; William B. Bunn III, J.D.; Raymond Greenberg, M.P.H.; Sherry Lene Hall, M.P.H.; Marshall Plotka, P.P.S.; Byron D. Russel, M.H.A.; John H. Rutledge, J.D.; Gregg M. Stave, J.D.; and William B. Watson, M.P.H.

William B. Bunn III, Raymond Greenberg, and John H. Rutledge graduated this year.

Bill Bunn

Gene Broadhead

Bruce Watson

Jackie Rutledge

CENTRAL TEACHING FACILITY

First year at Duke without the folks who preside over Central Teaching Laboratories wouldn't be first year. Their steady presence, their ability to find more (more?!) handouts for that center drawer, their control over audio-visual, their rule over the locked rooms for overnight use, their constant knowledge of our schedules all makes them sound like a group of tough autocrats. Actually they are invaluable in keeping the first year bearable. That it runs so smoothly is definitely due to their efforts; that students can avoid a lot of time-consuming details is also a result of their being around. Deborah's coffeepot and smile have pulled many through those long afternoon labs. Bernadine Riley, Milo Street, Reginald Haskins and Russell Borland, the rest of the crew were equally as helpful. And when Carol Reilly had her baby last year, the first year class was right up there with the front-row admirers. We thank them for their support, their willingness to help at any moment, and their humaness in that mad world of first year basic sciences.

Bernie

Carol

Deborah

PATRONS

Duke Medical School was created through generous donations during the early part of this century and through the years has enjoyed strong continued support. This 50th Anniversary Yearbook is but an example. The following pages are a tribute to those who have faithfully supported out efforts toward this Yearbook.

We, the staff members, express our deepest appreciation to the Faculty, Administration, and Alumni who have made individual donations. We also appreciate the patronage of the Davison Club and the Medical Alumni Association who continue their traditional support of the Medical Center.

The largest portion of the Patrons Section consists of advertisements from businesses around Durham and North Carolina who have faithfully served Duke and its employees for many years. We extend our thanks to them and hope that they will continue to receive your continued interest. There are also several advertisements from North Carolina Hospitals interested in attracting new physicians to their communities. They offer a great many varied opportunities here in this fine state and ask new graduates to consider them.

The final pages consist of a Memorial to Dr. J. Deryl Hart written by the Chairman of Surgery, Dr. David C. Sabiston, Jr., John's closing dedication of the Yearbook and some closing remarks.

I would like to personally thank those who helped me prepare this portion of the book: Faith Birmingham, who did an excellent job of getting the ball rolling; Tom White, Michael Neuss, Marti Gagliano, Joyce Tibbetts and Rosier "The Beach-Tuna" Dedwylder, who all helped to bring in ads. But alas, without our Editor this book would not have been possible, and so I thank him for the diligent work and help he gave us.

K.K.

11

PATRONS

AESCULAPIAN / 80 Patrons 485
Davison Club 488
Medical Alumni Association 490
Advertisements 491
Memorial 512
Gallery 514
Dedication 515
Closing 516

Section Editor
Kemp Kernstine
Assistant
Faith Birmingham

NO-TO-BAC

NO-TO-BAC

NO-TO-BAC
Kills the
Tobacco Habit

Sold & Guaranteed,
By All Druggists.

AESCULAPIAN/80 PATRONS

Rosalind Smith Abernathy
W. Allen Addison
Charles S. Adler, M.D.
Bruce Africa, Ph.D., M.D.
Gerald B. Ahmann
Marvin S. Amstey, M.D. Duke '64
Dana K. Anderson, M.D.
W. Banks Anderson, Jr.
Cliff and Lou Andrew
Dr. William G. Anlyan
W. Benjamin Ardrey, III, M.D.
Jay M. Arena, M.D.
George F. Armstrong, Jr., M.D.
Samuel M. Atkinson, Jr., M.D.
Robert M. Auburn, M.D.
Leona W. Ayers, M.D.
Robert I. Ayerst, M.D.
Robert L. Baeder, M.D.
Bruce L. Baer, M.D.
Farideh Bagne, Ph.D.
Elizabeth Renwick Baker, M.D.
Linny M. Baker, M.D.
Roger and Eleanor Baker
W.E. Baldwin, Jr., M.D.
Graham Arthur Barden, Jr., M.D.
Sherwood W. Barefoot, M.D.
Crawford F. Barnett, Jr., M.D.
James G. Bassett
Alan L. Bateman, M.D. 1974
George J. Baylin
Robert H. Beekman, M.D.
James B. Berry, Jr., M.D.
Stephen C. Beuttel, M.D.
Gustave F. Bieber, M.D.
George A. Bishopric, M.D.
John R. Black, M.D.
Lillian R. Blackmon, M.D.
John V. Blady, M.D.
Saul Blatman, M.D.
Jack Boatman, M.D.
John T. Bonner, M.D.
O. Watts Booth
Edward H. Bossen, M.D.
Edward G. Bowen, M.D.
Dr. and Mrs. William D. Bradford
Jacob T. Bradsher, Jr., M.D.
Joseph R. Brandy, M.D.
Albert H. Bremer, M.D.
Joseph D. Brenna, M.D.
Marianne S. Breslin, M.D.
R. McIntyre Bridges, M.D., FACS
Charles L. Brock, M.D.
Julian Stanley Brock, M.D.
Dr. and Mrs. H. Keith H. Brodie
Bernice P. Brooks
W. Lester Brooks
Walter J. Brower, M.D.
John W. Brown, M.D., FACS

George W. Brumley, M.D.
C. E. Buckley, III, M.D.
David Kennedy Buckley, M.D.
Daniel C. Budd, M.D.
Warner M. Burch, M.D.
Margaret Burns, M.D.
Ewald W. Busse, M.D.
Drs. Gene and Suzanne Butcher
John W. Caffey
Henry A. Callaway, Jr., M.D.
J. Lamar Callaway, M.D.
John S. Campbell, M.D.
Louis A. Cancellaro, Ph.D., M.D.
Henry James Carr, Jr., M.D.
C.E. Carter
Joseph C. Cauthen, III, M.D.
Robert E. Chambers, M.D. '52
George O. Chase
James T.T. Chen, M.D.
McKinley Cheshire, M.D.
Kwok-Sing Cheung
William Chew, M.D.
Arthur C. Christakos, M.D.
James R. Clapp, M.D.
Herbert W. Clegg, II, M.D.
J.E. Clement, M.D.
William G. Cobey, M.D.
Harvey Jay Cohen, M.D.
Louis D. Cohen
Dr. T.C. Cole, Jr.
R. Edward Coleman, M.D.
John P. Collins, M.D.
Richard G. Connar
John Samuel Cook
Paul H. Cook, M.D.
Evelyn Vail Coonrad
Ralph Corey
Robert F. Corwin, M.D.
S.J. Counce
Edwin B. Cox, M.D.
Jim L. Cox, M.D.
J. Burns Creighton, Jr., M.D.
Dr. and Mrs. T.H. Crowder, Jr.
Dwight P. Cruikshank, M.D.
John L. Currie, M.D.
J. Henry Cutchin, Jr.
D. Joshua Cutler
Thomas Manning Daniel, '51
Michael E. Davies, M.D.
William T. Davison, M.D.
David J. Deas
H. Sykes DeHart, M.D.
Skottowe W. DePass, M.D.
Hugh Dortch, Jr.
Albert Hugh T. Doss, M.D. — Psychiatry & Geropsychiatry-Hypnotherapy
Robert P. Drucker

Howard C. Duckett, M.D.
Alden W. Dudley, Jr., M.D. 1962
Duke House Staff Office
Kenneth L. Duke
Neil M. Dunn, M.D.
Newton Du Puy, M.D.
Dr. and Mrs. William M. Eagles
Eleanor Easley, 1934
Benjamin F. Edwards, M.D.
I. Keith Edwards, M.D.
Mary Futrell Eggers, M.D.
Carl Eisenberg, M.D.
George J. Ellis, M.D.
Roy J. Ellison, Jr., M.D.
Dr. and Mrs. Melvin L. Elson
George Engstrom
Dr. Stephen S. Entman
Harold P. Erickson
Elizabeth Jackson Esoda, M.D. '52
Jack C. Evans
John W. Everett, Ph.D.
Lennart Fagraeus, M.D., Ph.D.
Albert W. Farley, Jr.
Joseph C. Farmer, Jr., M.D.
William D. Farmer, M.D.
Dr. and Mrs. Robert Farnham, III
John A. Feagin, M.D.
Robert J. Feder, M.D.
William H. Fee, Jr., M.D. Duke '68
Mary C. Fendt
Thomas B. Ferguson, M.D. '47
Dr. Bernard F. Fetter
Robert B. Fisher, M.D.
Edward G. Flickinger
Joseph B. Ford, Jr.
Richard S. Foster, M.D.
James W. Fox, M.D.
Lucy Rawlings Freedy, M.D.
James C.A. Fuchs
Dr. and Mrs. Robert H. Furman
Stanley A. Gall, M.D.
Harry A. Gallis
R. Kristina Gedgaudas, M.D.
Elias F. Ghanem, M.D.
George G. Gilbert, M.D.
Jeff K. Giquere
Dr. and Mrs. Kenna S. Given
William H. Glass, M.D.
Albert P. Glod
Nathaniel Banks Glover, M.D.
H. Fred Gober, Jr., M.D.
Donald Goldberg, M.D.
Lowell A. Goldsmith, M.D.
Doyle G. Graham, M.D., Ph.D.
Suzanne Graham, M.D.
Lorents Gran, Visiting Assoc. Prof.
George R. Grant, Jr., M.D.
Frederick Q. Graybeal, Jr.

AESCULAPIAN/80 PATRONS

Robert Green, M.D.
Frank J. Greskovich, D.M.D. — Oral-Maxillofacial Surgery
Harvey E. Grode, M.D.
Dr. and Mrs. Diller B. Groff
Frederick L. Grover, M.D.
James A. Halikas, M.D.
C. Fremont Hall, M.D.
Jean and Ruf Hambright
Dr. Harry M. Holtz
Dr. and Mrs. Philip A. Hourigan, Jr.
Terry M. Hudson, M.D.
John L. Hughes, M.D.
Dr. and Mrs. Keith L. Hull, Jr.
Mary M. Huse
James J. Hutson, M.D.
James M. Ingram, M.D.
C. Warren Irvin, Jr.
Dr. Richard C. Irving
Joseph McKinney Ivie, M.D.
W. Scott James, M.D.
Laurena Booker Japenga, M.D.
W. Thomas Jay, Jr., M.D.
Allen N. Jelks, Sr., M.D.
Maj. Gen. Raymond T. Jenkins, USAF
Charles Johnson
Frank R. Johnston
J. Kempton Jones, M.D.
Paxton L. Jones, M.D.
William B. Jones, M.D.
Lyndon K. Jordan, M.D.
Vincent A. Joy, M.D.
S. Stanley Juk, Jr., M.D.
Stephen G. Kahler
Seymour R. Kaplan, M.D.
Mervyn R. Hamlin, M.D.
Charles B. Hammond, M.D.
Dr. and Mrs. Frank T. Hannah
James L. Hansen, M.D.
George T. Harrell
B.C. Harris, M.D. '58
Robert H. Harris, Jr.
John Martin Hicks Hart
James L. Hausen, M.D.
Harold E. Harvey, M.D.
Spike Harvey
William L. Hassler, M.D.
David M. Hawkins, M.D.
Charles P. Hayes, Jr., M.D. 1959
James H. Haynes, M.D.
Dr. and Mrs. John Hebb
Kevin Michael Hepler, M.D.
Joseph S. Hiatt, Jr., M.D. '40
James T. Higgins, Jr.
Robert L. Hill
Frederick R. Hine, M.D.
Robert L. Hirschfeld, M.D.
G.B. Hodge, M.D. — H.S. Surgery 1942-1948
William F. Hollister, M.D.
James W. Holsinger, Jr., M.D.
Walter L. Holton, M.D.
Stanley Karansky, M.D.
Joannes H. Karis, M.D.
Drs. Catherine and Samuel Katz
Michael D. Kaufman, M.D.
William H. Kaufman
E. Daniel Kay, Jr., M.D.
Frederick M. Kelvin
Malcolm Eugene Kendall, M.D.
John D. Kennedy, M.D.
Dr. Grace Kerby
Jerry W. Kerner, M.D. 1937
May Gray King
Dr. and Mrs. Thomas R. Kinney
Thomas A. Kirkland, Jr., M.D.
Glenn Kiser
Dr. Gordon K. Klintworth
Grey B. Kornegay, M.D.
Ross T. Krueger, M.D.
Stephen M. Kulvin, M.D.
Hanna C. Kutteh, M.D.
W.A. Lambeth, Jr., M.D.
Kenneth R.L. Lassiter, M.D.
John Laszlo, M.D.
Gerald S. Lazarus, M.D.
Dale N. Lawrence, M.D.
Dr. and Mrs. Eugene S. LeBauer
Dr. E. Joseph LeBauer
J. Fletcher Lee, M.D.
Pope M. Lee, M.D.
C.W. Legerton, Jr., M.D.
Julian C. Lentz, Jr., M.D.
Michael J. Lepore, M.D.
J. Bancroft Lesesne, M.D.
J.M. Lesko, M.D.
Drs. Anthony and Maria Limberakis
Eugene J. Linberg, M.D.
Calvin C. Linnemann, Jr.
Dr. Frank H. Longino
Robert F. Lorenzen, M.D.
James McLean Love, M.D.
Mr. and Mrs. John F. Lucas, III
Paul W. Lucas
Enoch A. Ludlow, M.D.
Kenneth Ward Lyles, M.D.
Henry G. Magendantz, M.D.
James D. Mallory, Jr., M.D.
John Hugh Malone, Jr.
Dr. Paul F. Maness
Frank R. Mann, Jr., M.D.
Emanuele Mannarino, M.D.
Richard L. Marafioti, M.D.
George Margolis, M.D.
Lester H. Margolis, M.D.
Dr. and Mrs. Robert N. Marshall, Jr.
Dean T. Mason,M.D.
Mac Mauney, M.D.
David R. Maynard, M.D.
J.S. Mayson
Angus McBryde, Jr.
The Doctors McCarty
Robert S. "Nick" McConaughy,M.D.
Clayton H. McCracken, Jr.
D.J. McCulloch, M.D.
Ralph McGraw, Jr., M.D.
Douglas H. McGregor, M.D.
William L. McGuffin, Jr., M.D.
Henry D. McIntosh
Dr. and Mrs. Robert McLelland
Michael E. McLeod
Robert L. McMillan, 1933
Jesse N. McNiel, M.D.
Harry T. McPherson
Robert L. McWhorter, Jr., M.D.
Medical School Admissions
Theo H. Mees, M.D.
David F. Merten, M.D.
D. Edmond Miller, M.D.
Joseph P. Miller, M.D.
Richard Lawrence Miller, M.D.
Richard A. Mladick, M.D.
Reginald Graham Moore, Jr., M.D.
Claude T. Moorman, II
Lloyd A. Moriber, M.D.
Ashton and Claire Morrison
Vince Moseley, A.B., M.D., L.H.D., FACP, FRSH
Dr. Henry C. Mostellar, Jr.
Joseph A. Moylan
Edwin H. Mulford, II, M.D.
Colin A. Munroe, M.D.
David A. Nagey, M.D., Ph.D.
Russell Nahigian, M.D.
Charles L. Nance, Jr., M.D.
Dr. Blaine Nashold, Jr.
John William Neal, V, M.D.
William R. Nesbitt, M.D.
Dr. Barbara Newborg
Glenn E. Newman
K. T. Noell, M.D.
Linda E. Norton, M.D.
John B. Nowlin
W. Jerry Oakes, M.D.
Linda Clark Obenour, M.D.
William H. Obenour, Jr., M.D.
Guy L. Odom, M.D.
J. Leonard Goldner, M.D., and Orthopaedic Division Members

AESCULAPIAN/80 PATRONS

Stephen G. Osofsky, M.D.
Roger H. Ostdahl, M.D.
Drs. Suydam and Shirley Osterhout
John F. Ott, M.D.
C.L. Ould, M.D.
Dr. Steven Paris
Joseph B. Parker, Jr., M.D.
Roy T. Parker, M.D.
Vann Parker, M.D.
James Parmentier
Larry H. Parrott, M.D.
John R. Pate, M.D.
Grover S. Patterson, M.D.
William P.J. Peete
Ellison C. Pierce, Jr., M.D.
George H. Pierson, Jr.
Robert Lloyd Pinck, M.D.
James H. Pollock, M.D.
Dr. Pierre P. Poole
R.W. and M.E. Postlethwait
James B. Powell, M.D.
Robert C. Powell, M.D., Ph.D.
Thomas E. Powell, III, M.D.
Sandra D. Priddy
Marilynn A. Prince
Allen DaRin Puppel, M.D.
Charles E. Putman
Richard Z. Query, Jr.
George J. Race, M.D.
Raymond Hamilton Ralston, M.D.
Panol C. Ram, M.D.
Dr. and Mrs. Charles L. Rast, Jr.
John Reckless, M.D.
Michael K. Reedy, M.D.
Dr. Keith A. Reimer
John R. Rice
Reed P. Rice, M.D.
Robert E. Rider, M.D. 1961
Bernard A. Rineberg, M.D.
N. Larry Roach
Jesse E. Roberts, M.D.
Louis C. Roberts
James David Robertson
Roscoe R. Robinson, M.D.
J. Forbes Rogers, M.D.
Larry A. Rogers
Max P. Rogers, M.D.
Allen D. Roses, M.D.
Dr. and Mrs. Manfred S. Rothstein
Ralph E. Roughton, M.D.
Carl J. Rubenstein, M.D.
Richard A. Ruskin, M.D.
David C. Sabiston, Jr., M.D.
Garrett F. Saikley, M.D.
Herbert A. Saltzman, M.D.
Fred Sanfilippo, M.D., Ph.D.
Dr. and Mrs. Paul Sarazen
Nancy Alyea Schiebel
Ernest Edwards Schnoor, M.D.
Dr. Jared N. Schwartz
James C. Seabury, Jr., M.D.
Alfred M. Sellers, M.D.
Donald Serafin, M.D.
Dr. Gerald Serwer
C.F. Seymour, M.D.
Dale R. Shaw, M.D.
John D. Shelburne, M.D., Ph.D.
William W. Shingleton
Harold R. Silberman, M.D.
David N. Silvers, M.D.
Harold Simon, M.D. 1955
Paul E. Simpson, M.D.
Robert L. Smith
Dr. and Mrs. Alan Solomon
Gregory V. Solovieff, M.D.
George Somjen, M.D.
Joachim R. Sommer, M.D.
Kurt W. Sontag
A. Sordill, M.D.
George A. Sotirion, M.D.
Madison S. Spach
William H. Spencer, III
Dr. and Mrs. Angelo P. Spoto, Jr.
J. John Stasikowski, M.D.
John D. Staub, M.D. ’46
Nancy W. Stead
Dr. William W. Stead
Richard A. Steele, M.D.
Dr. and Mrs. B.E. Stephenson
Charles P. Stevick
Robert Maxwell Stewart
H. Ben Stone, III, M.D.
Hunter G. Strader, Jr., M.D.
Nathan Philip Strause, III
Timothy Strickler
Karl J. Stumpf, M.D.
Dr. and Mrs. Robert Grist Sumner
Raymond Lee Swetenburg, Jr.
Allen Taylor
Robert Wade Taylor, M.D.
J. Robert Teabeaut, II, M.D.
Jack L. Teasley, M.D.
Thomas Byron Thames, M.D.
Thomas T. Thompson, M.D.
Thom S. Thomassen, M.D.
William Moreau Thompson, M.D.
Dr. G.T. and E.H. Thornhill
H.B. Thurston
James Stuart Tiedeman
Lloyd F. Timberlake, M.D.
Robert F. Todd, M.D., Ph.D.
Harry E. Trantham, M.D.
Eulyss R. Troxler, M.D.
James L. Tullis, M.D.
Dr. and Mrs. Harry T. Tully, Jr.
Stephen R. Turner
C. Gilbert Tweed, M.D., P.A.
Malcolm P. Tyor, M.D.
Dr. and Mrs. George Irvin Uhde
Dr. Thomas W. Uhde & Dr. Marlene Kraus
Lee C. Underwood, III, M.D.
James R. Urbaniak, M.D.
W.W. Vallotton, M.D.
Thomas D. Vance, M.D.
Robert J. Vanderlinde
Joe M. Van Hoy, A.B. ’34, M.D. ’38
William L. Venning, M.D.
Dr. Giles Wesley Vick, III
Dr. Martin I. Victor
Frederick C. Vogell, M.D.
Galen Wagner
Frederic M.J. Walp, M.D.
Dr. and Mrs. Woody Walburton
William G. Ward, M.D.
Charles E. Warner
Richard Waugaman, M.D.
Robert A. Waugh, M.D.
Harry L. Wechsler
K.D. and Mildred H. Weeks
Kenneth D. Weeks, Jr., M.D.
Milton Weinberg, Jr., M.D.
Richard D. Weiner, M.D., Ph.D.
Dr. and Mrs. Stanley Weitzner
Floyd L. Wergeland, Jr., M.D.
David S. Werman, M.D.
Thad B. Webter
Norman Wetterau
Robert E. Whalen, M.D.
Donald White, M.D.
Jack Widness
Eugene O. Wiggs
George D. Wilbanks, M.D.
Robert H. Wilkins, M.D.
Hilda Pope Willett
Charles D. Williams, Jr., M.D.
Candler A. Willis, M.D.
Ben Matthews Willwerth
Joanne A.P. Wilson, M.D.
John W. Wilson, Jr., M.D.
Thomas Wilson, M.D.
Robert E. Windom, M.D.
Philip Barnes Woodhall, M.D.
John L. Wooten
James B. Wyngaarden
John A. Yarborough, M.D.
William E. Yarger, M.D.
Charles G. Young, M.D., FACPM
Robert B. Yudell, M.D.
Susan Engel Zarutskie, M.D.

THE DAVISON CLUB

DAVISON CENTURY CLUB MEMBERS

John Battle Haslam, M.D. '65
Frank T. Hannah, M.D. '64
Mr. Mack W. Overman
William G. Anlyan, M.D.
Ms. Barbara Echols Anlyan
Mr. R.C. "Bucky" Waters
Norris W. Crigler, Jr., M.D. '76
Mr. Edwin T. Ferren, III
John H. Dorminy, III, M.D. '74
Ms. Meg Darden McLeod '49
Joseph E. Walker '51, M.D. '60
Emile L. Gebel '58, M.D. '62
Douglas G. Kelling, Jr., M.D.
Mrs. Cheryl Kelling
Henry T. Perkins, Jr. '54, M.D. '57
Mr. Nat Koenigsberg
Mrs. Suzanne H. Koenigsberg
Walter T. Parkerson '57, M.D. '60
Daniel S. Meister, D.D.S.
Thomas E. Powell, III, M.D. '61 and Mrs. Betty Y. Powell
James W. Plonk '64, M.D. '68
Ken and Sally Harris
Mr. William F. Franck '39
James P. Gills, M.D. '59
John Fair Lucas, III, M.D. '81 and Marsha Adams Lucas, M.D. '82
Paul H. Cook '47 M.D. '51
Merel H. Harmel M.D. and Armide Harmel
P.J. "Jack" Baugh
William C. Pfister '71 M.D. '75
Joan Friedlein
Dan Hill, III. T '66
J. Burns Creighton, Jr. M.D. '57
Larry A. Rogers, M.D. '65
Fred P. Sanfilippo, M.D. '76
William M. Nicholson, Jr. T '63
Richard S. Buddington T '64
Norman A. Thorne, M.D. '58
F. Maxton Mauney, Jr., M.D. '59
Thomas Byron Thames, M.D. '55
E.M. "Bucky" Williams
Richard A. Steele, M.D. '56
William A. Gay, Jr., M.D. '61
Kenneth G. Gould, Jr., M.D. '54
Ann F. Angell, '44 M.D. '49
Jared N. Schwartz, M.D. '74

DAVISON CLUB LIFE MEMBERS

Mr. Edward H. Benenson
Mr. Loren M. Berry (Deceased)
Mrs. Ruth Berry
R. McIntyre Bridges, M.D. '53
Ms. Betty Dumaine
Eleanor B. Easley, M.D. '34
Mr. Henry David Epstein
Blake Fawcett '43, M.D. '47
Mr. Edwin T. Ferren, III
Mrs. Emily G. Ferren
Mr. William H. Gatling T. '43
Mrs. Eleanor Kinney
William McAnally, Jr. '34, M.D. '39
Mr. Herman "Mac" McMurry
Calvin H. Mitchell, M.D. '58
Mr. John D. Shytle
Mrs. Lois Shytle
A. Jack Tannenbaum, M.D. '35
Donald C. Mullen, M.D. '61
Frances Jones Baugh
Kathryn S. Barrow
William Barrow, Jr.

DAVISON CLUB MEMBERS

Jerome E. Adamson, M.D. '54
Roy A. Agner, Jr., M.D. '51
J. Powell Anderson, M.D. '49
Ann Fouch Angell '44, M.D. '49
Jay M. Arena, M.D. '32
Herman L. Baird
Horace M. Baker, Jr., M.D. '44
Ralph P. Baker, M.D. '43
Julia C. Baldwin
Milton A. Barber, III
John A. Barrett, Jr., M.D. '54
Mrs. William Barrow
Juan F. Batile, M.D. '79
P.J. Baugh '54
Karl D. Bays
Frank L. Beckel '40, M.D. '44
Warren Bell
Edward P. Benbow, M.D. '41
James B. Berry, M.D. '50
William W. Blackburn, II '63, M.D. '67
Robert E. Bledsoe, M.D. '51
Joe L. Bonnett, M.D. '49
Edward G. Bowen, M.D. '59
Richard M. Bowles '46, M.D. '52
Joseph R. Brandy, M.D. '54
Phillip Brass, M.D. '52
Marianne S. Breslin, M.D.
Albert M. Bromberg, M.D. '57
Lester Brooks, M.D. '47
Edwin W. Brown '37, M.D. '41
W. Franklin Brown '37
John B. Bryan '44, M.D. '46
Joseph M. Bryan
Mrs. Kathleen Bryan
William F. Bryant, Jr. '54, M.D. '58
Richard S. Buddington '64, M.D.
Charles P. Bugg '47, M.D.
Daniel J. Bullard
C.S. Burton, Jr.
Ewald W. Busse, M.D.
William G. Butler, Jr., M.D. '53
Arthur Cassell
John J. Cavanagh
Arthur C. Chandler, Jr., M.D. '59
McKinley Cheshire, M.D. '58
C. Franklin Church, M.D. '63
James R. Clapp, '54, M.D.
Robert E. Cline '60, M.D. '63
Warren J. Collins '46, M.D. '48
Perry R. Como
Mrs. Roselle B. Como
S.A. Conna '55, M.D. '62
Richard G. Connar '41, M.D. '44
Paul H. Cook '47, M.D. '51
A.M. Covington, M.D. '50
J. Burns Creighton, Jr., M.D. '57
T. Harold Crowder, Jr., M.D. '55
George J. D'Angelo, M.D.
David J. Deas '57, M.D. '61
Hugh L. Deaton, M.D.
J.T. Lewis Dickinson, Jr.
John H. Dillard
John H. Dorminy, Jr.
Alden W. Dudley, Jr., M.D. '62
Raymond J. Duffy, M.D. '33
E.B. Dunlap, Jr., M.D. '39
Newton DuPuy, M.D. '32
William M. Eagles, '40, M.D. '44
I. Keith Edwards '49, M.D. '53
Albert W. Farley, Jr., '44, M.D. '47
Joseph C. Farmer, Jr. '58, M.D. '62
Michael J. Feeney, M.D. '44
Richard W. Finner, M.D. '40
E.L. Fisher, Jr. '55, M.D. '57
Richard D. Floyd, M.D.
Eugene N. Forrester, M.D. '54
J. Thomas Foster, M.D. '62
William F. Franck, Jr. '39
Joe W. Frazer, Jr., M.D. '52
Thomas E. Frothingham, M.D.
Norman Garrett, Jr. '45, M.D. '50
William A. Gay, Jr., M.D. '61
Nicholas G. Georgiade, M.D. '50
James F. Gibson '52, M.D. '56
James P. Gills, M.D. '59
James F. Glenn, M.D. '53
James F. Goodmon
Robert P. Gorrell '53
Thomas L. Gorsuch '47, M.D. '51
Kenneth G. Gould, Jr. '50, M.D. '54
Robert Green '56, M.D. '60
Stephen A. Greenberg, M.D.
Ashton T. Griffin, III, M.D. '58
Basil Griffin '62, M.D.
Kenneth D. Hall '49, M.D. '53
Rufus R. Hambright '44, M.D. '50
Mrs. Mildred Engel Handleman
Charles A. Hanson '47, M.D. '51
Merel H. Harmel, M.D.
Milton E. Harrington
Joseph S. Hiatt, Jr. '36, M.D. '40
Julius N. Hicks, M.D. '53

THE DAVISON CLUB

Hilton Inn — Durham
G.B. Hodge, M.D.
William F. Hollister, M.D. ’38
Earl P. Holt, Jr. ’42, M.D. ’45
William S. Houck, Jr., M.D.
William M. Hull, Jr., M.D. ’63
L. Ronald Hurst ’53, M.D. ’57
Lenard E. Jacobson ’60, M.D. ’64
W. Scott James, Jr., M.D. ’57
John A. Jarrell, Jr., M.D.
W. Thomas Jay, Jr. ’46, M.D. ’48
Charles A. Johnson ’59, M.D. ’64
Paul A. Johnson, M.D. ’57
Karl C. Jonas, M.D. ’44
Edwin L. Jones, Jr. ’44
John Wesley Jones, M.D. ’76
Robert J. Jones
Daniel R. Kanell, M.D.
Leonard J. Kaplan
Samuel L. Katz, M.D.
George A. Kelser, M.D.
Frank H. Kenan
Victor J. Keranen, M.D. ’64
Herbert D. Kerman ’38, M.D. ’42
John R. Kernodle, M.D. ’42
Henry E. Kistler, Jr. ’57, M.D. ’61
Edward J. Kitlowski, M.D. ’57
Frederick R. Klenner, M.D. ’36
Grey B. Kornegay, M.D. ’50
Martin J. Kreshon, M.D.
Donald J. Kroe, M.D. ’63
Beatrice H. Kuhn, M.D. ’43
Harold H. Kuhn, M.D. ’40
J. Ward Kurad A.B. ’56, M.D.
William A. Lane
Kenneth R.L. Lassiter, M.D. ’61
Jack Lazar
Nicholas C. Leone, M.D. ’50
John G. Leonardy ’52, M.D. ’55
Charles P. Lewis, Jr., M.D. ’50
William R. Lewis, Jr., M.D. ’57
J. William Littler ’39, M.D. ’42
William F. Lovell ’42, M.D. ’45
Edward B. Mabry ’50, M.D. ’53
Robert Machemer, M.D.
Daniel A. Mairs ’46, M.D. ’50
Joseph E. Markee, Jr., M.D. ’65
Jane Gregory Marrow, M.D. ’43
George K. Massengill ’31, M.D. ’35
William J. Massey, III ’58, M.D. ’62
Joel Mattison, M.D. ’61
Myron D. Mattison, M.D.
Dean McCandless, M.D. ’50
Francis H. McCullough, Jr., M.D. ’44
John P. McGovern ’43, M.D. ’45
Donald E. McIntire
Harold F. McKnight
F. Maxton Mauney, Jr., M.D. ’59
Benjamin N. Miller ’32, M.D. ’35
D. Edmond Miller ’52, M.D. ’56
Roger Milliken
Mrs. Margaret M. Mozingo
Ashton B. Morrison, M.D. ’46
Stanely B. Morse
William H. Muller, Jr., M.D. ’43
Donald C. Mullin, M.D. ’61
Robert J. Murphy, M.D.
Mrs. Louise B. Neeley
Mrs. Glenn C. Newman
Mrs. Marion Guest Nichols
Sidney S. Nichols
Pat I. Nixon, Jr. M.D. ’39
Miss Grizzelle M. Norfleet
Charles S. Norwood, Jr.
Keith M. Oliver, M.D. ’44
Ronald E. Paul, M.D. ’61
George H. Pierson, Jr., M.D. ’54
Michael T. Pishko, M.D. ’36
William R. Pitts ’29, M.D.
Ralph B. Pond
Elizabeth B. Powell, M.D. ’38
T. Edward Powell, III, M.D. ’61
Grady E. Price ’55, M.D. ’60
Harold E. Pugh
Richard Z. Query, Jr., M.D. ’35
Galen W. Quinn, D.D.S.
Robert R. Rainwater
James Walker Ralph, M.D. ’62
Raymond H. Ralston, M.D. ’35
W. Kenan Rand, Jr.
Richard B. Rankin, Jr., M.D. ’35
Henry E. Rauch
James F. Reinhardt, M.D. ’42
John M. Rich ’62, M.D. ’66
E. Tyson Ricketts ’34, M.D. ’36
Bernard A. Rineberg ’56, M.D. ’60
Clive E. Roberson, M.D. ’61
R.R. Robinson, M.D.
Larry A. Rogers, M.D. ’65
Leonard Rothstein, M.D. ’54
David C. Sabiston, Jr., M.D.
Luther C. Sappenfield, Jr., M.D. ’57
Paul M. Sarazen, M.D. ’48
Allen J. Savitt, M.D. ’52
L. Everett Sawyer ’35, M.D. ’39
John E. Scheid, M.D. ’46
Dana R. Schmidt, M.D. ’49
F.K. Schmidt, M.D. ’44
Leonard H. Schuyler, M.D. ’50
James H. Semans, M.D.
Mrs. James H. Semans
C. Norman Shealy ’53, M.D. ’56
William W. Shingleton, M.D.
Arthur Siegal
Herbert O. Sieker, M.D.
Melvin D. Small, M.D. ’59
R. Cathcart Smith M.D. ’39
Whitman E. Smith, Jr., M.D. ’57
Wilbur S. Smith
Earl N. Solon, M.D. ’49
Angelo P. Spoto, Jr., M.D. ’57
George F. Staehel, M.D. ’48
Eugene A. Stead, Jr., M.D.
Delford L. Stickel ’49, M.D. 53
Margaret P. Sullivan, M.D. ’50
Robert G. Summer, M.D.
George F. Sutherland ’36, M.D. ’42
Stanley K. Tanger
Frederick H. Taylor, M.D. ’45
J. Robert Teabeaut, II, M.D. ’47
Thomas Byron Thames, M.D. ’55
Frank B. Thompson, M.D. ’59
Donald H. Tucker, ’55, M.D. ’58
George I. Uhde ’34, M.D. ’36
William B. Waddell ’51, M.D. ’62
W.R. Waldron
Mrs. Mary Walker
Charles E. Warner, M.D. ’58
K.D. Weeks, M.D. ’39
Milton Weinberg, Jr. ’45, M.D. ’47
Joel J. Weiser, M.D. ’62
John G. Wellman
Millard W. Wester, Jr. M.D. ’52
Thad B. Wester ’46, M.D. ’51
James G. Whildin ’35, M.D. ’37
William C. Whitesides, Jr., M.D. ’44
George D. Wilbanks, Jr. ’53, M.D. ’56
Jack R. Wilkins
Mrs. Coma Willard ’22
Walter B. Willard
Alfred H. Williams
Edward E. Williams
Edward M. Williams
Jack D. Williams ’60, M.D. ’65
Jarrett E. Williams ’32, M.D. ’34
Roger D. Williams ’46, M.D. ’47
Robert P. Williams ’49
Robert E. Windom ’52, M.D. ’56
John M. Wilson, M.D. ’43
Raphael Wolpert, D.D.S.
Barnes Woodhall, M.D.
Richard N. Wrenn, M.D. ’47
James B. Wyngaarden, M.D.
John A. Yarborough ’41, M.D. ’44

IN MEMORIAM

George R. Andrews ’43, M.D. ’48
Loren M. Berry
Thomas C. Bost, M.D.
James F. Bruce, M.D. ’50
T.C. Cooke
W.C. Davison, M.D.
Stark S. Dillard
Oscar R. Ewing
Alex George AB ’31
James G. Hanes
Hal C. Hollard, M.D. ’54
Reginald H. Johnson, Jr., M.D. ’50
Thomas D. Kinney, M.D. ’37
Glenn C. Newman ’36, M.D. ’39
Mrs. Henry E. Rauch
John Renzulli
Carroll C. Shoemaker, M.D. ’56
Hunter Sweaney, M.D.

50TH
ANNIVERSARY
1930-1980

Congratulations to the Classes of 1980 and 1981
for their superb 50th Anniversary yearbook
and welcome to

THE DUKE MEDICAL ALUMNI ASSOCIATION

OFFICERS OF THE MEDICAL ALUMNI ASSOCIATION

President: W. Scott James, Jr. MD '57
President-elect: William M. Eagles MD '44
Secretary-Treasurer: Jay M. Arena MD '32
Past-President: Ralph P. Baker MD '43

MEDICAL ALUMNI EXECUTIVE COUNCIL

Elizabeth R. Baker MD '75
E. Stephen Edwards MD '63
Bernard F. Fetter MD '44
Emile L. Gebel MD '62
G.B. Hodge MD, HS '42-47
John F. Lucas, III *(Medical Student Representative)*
Joseph P. McCracken MD '38
G. Edwin Newman MD '73
James F. O'Neill MD '54
Richard Z. Query MD '35
Margaret P. Sullivan MD '50
George F. Sutherland MD '42
Thaddeus B. Webster MD '51
R.C. "Bucky" Waters *(Director, Alumni Affairs)*
Janet T. Sanfilippo *(Associate Director, Medical Alumni Affairs)*

A full range of treatment...

As an Air Force physician, you may practice your specialty in modern, well-equipped facilities with a complete support staff.

In addition to the wide spectrum of clinical experience you'll gain, you'll have administrative support to alleviate most of the clerical workload. The type of medicine you will practice is based on the needs of your patients, regardless of their financial status.

For yourself and your family, Air Force medicine will provide reasonable working hours, excellent pay, 30 days of paid vacation each year, and many other benefits.

Consider the Air Force Medical Corps — a reasonable alternative for today's physicians.

For complete information contact: USAF Health Profession, Box 27566, Raleigh, N.C. 27611, OR CALL: (919) 755-4134.

Air Force.

A great way of life.

DUKE CHILDREN'S CLASSIC CELEBRITY-AMATEUR TENNIS TOURNAMENT

In May of each Spring

DUKE UNIVERSITY CAMPUS
DURHAM, NORTH CAROLINA

---

fn Frank Novak
& Sons, Inc.

PAINTING CONTRACTORS
SPECIALIZING IN COMMERCIAL
AND INDUSTRIAL BUILDINGS ...
OFFERING COMPLETE PAINTING
SERVICES ...
INCLUDING SPECIAL PAINTING EFFECTS,
UNUSUAL WALL TREATMENT AND
SPECIALIZED APPLICATION.

"WE WEAR OUR REPUTATION PROUDLY"

TEL. 216 / 475-5440

23940 MILES ROAD · CLEVELAND, OHIO 44128

"Chew on the bark of 2 willows and call me in the morning."

At the time of Hippocrates and for two thousand years thereafter, people turned to nature whenever they suffered pain. Thousands of remedies were concocted from herbs, berries and bark.

Today, we have a pain-relieving chemical that's called acetylsalicylic acid (aspirin). Surprisingly, it's chemically related to the same natural remedy that Hippocrates himself used to prescribe: the bark of the willow tree.

And for people who cannot take aspirin, we have a relative newcomer, acetaminophen (aspirin-substitute).

Whether made by nature or by man, chemicals have always played a major role in reducing pain and improving the quality of life.

No chemical is totally safe, all the time, everywhere. The challenge is to use chemicals properly. To help make life more livable. (And less painful.)

© Monsanto Company 1979

For a free booklet explaining the risks and benefits of chemicals, mail to:
Monsanto, 800 N. Lindbergh Blvd., St. Louis, Mo. 63166. Dept. A3NA

Name____________________

Address____________________

City & state ________________ Zip ________

Monsanto

Monsanto Triangle Park Development Center, Inc.
P. O. Box 12274
Research Triangle Park, North Carolina 27709

Without chemicals,
life itself would be impossible.

WILSON, NORTH CAROLINA
"a good place to live"

Join the expanding staff of professionals at one of Eastern North Carolina's finest general acute care facilities. If your ideal situation includes an opportunity to use your knowledge and skills to the fullest, you should consider fully accredited Wilson Memorial Hospital. Our total bed capacity is 388, with a total staff of more than 900, of which 220 are professional nursing personnel. Full-time and relief nursing positions are available. Excellent starting rate commensurate with experience as well as an extensive fringe benefit package.

Wilson Memorial Hospital
1705 S. Tarboro Street
Wilson, N.C. 27893

WILSON 1964

AN EQUAL OPPORTUNITY EMPLOYER

Congratulations
to the
Medical School
on your
50 th Anniversary

Turner

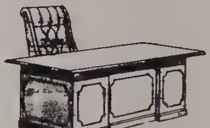
---

kimball
OFFICE FURNITURE
AUTHORIZED DEALER

DAVID L. COPE
PHYLLIS C. COPE

David's Office Interiors, Inc.

TOTAL QUALITY IN WOOD OFFICE FURNITURE



212 RIGSBEE AVE.·(919) 688-8036
DURHAM, N.C. 27702

SOUTH SQUARE MALL (UPPER LEVEL)

CIRCLE TOURS INC.

ADVENTURES IN LEISURE®

400 W. Main Street
Durham, North Carolina 27701

For All Your Travel Needs
Domestic & Foreign
Escorted or Independent Tours
No Charge for Our Service

"FOR INFORMATION CALL"
(919)-682-5478 / 541-9040
Groups & Charter 541-9050

Commemorating
fifty years . . .

50TH
ANNIVERSARY
1930-1980

®

®

Blue Cross
Blue Shield
of North Carolina

Working Together

THREE OF THE BEST WAYS TO MANAGE A PREEMIE

ISOLETTE® Infant Incubator
Infant Care System
Air-Shields Monitors

INSTRUMENTATION FOR THE FUTURE . . .
WHERE THE FUTURE BEGINS

NARCO AIR-SHIELDS
A DIVISION OF NARCO SCIENTIFIC
HATBORO, PENNSYLVANIA 19040, U.S.A. / (215) 675-5200

Compliments
of
Jim Holt
your
CIBA Representative

CONGRATULATIONS TO THE CLASS OF 1980
From

Burroughs Wellcome Co.

Makers of:
ACTIFED®
CORTISPORIN®
EMPIRIN®
EMPIRIN WITH CODEINE
LANOXIN®
NEOSPORIN®
SEPTRA®
SUDAFED®
and
ZYLOPRIM®

Headquarters:
3030 Cornwallis Road
Research Triangle Park, N.C. 27709
Manufacturing:
Intersection of Highways 11 and 13
Greenville, N.C. 27834

Compliments of...

SEARLE

People
providing
Healthcare
for
People.

Howmedica®
Quality Systems

Howmedica,Inc., Orthopaedics Division 359 Veterans Blvd., Rutherford, N.J. 07070

Leading the Way To Man's Heart

Pacemakers
Leads
Pacing System Analyzers
Telephone Monitoring Equipment
Medical Data Systems
Heart Valves
Cardiocare

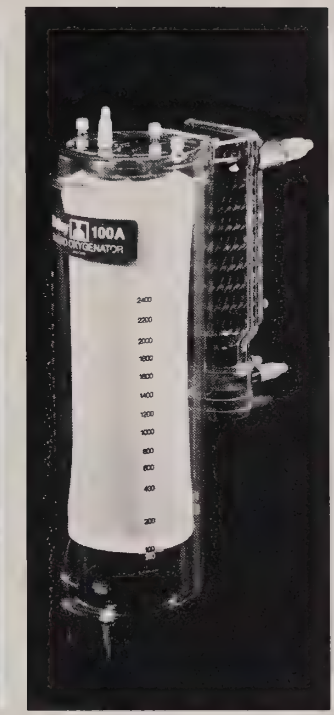
Medtronic

Valleylab

Congratulations on your fiftieth Anniversary

Valleylab, Inc.
Boulder, Co. 80301

Integral Members of the Open Heart Team



Björk-Shiley Cardiac Valve Prosthesis

The Björk-Shiley Valve continues to be the choice of cardiologists and surgeons for valvular replacement. A wealth of clinical experience substantiates the structural integrity of the valve.

Ionescu-Shiley Pericardial Xenograft

When compared to other tissue valves, the Ionescu-Shiley Pericardial Xenograft has shown superior hydraulic function in the smaller sizes normally required for the narrow aortic root. Superior hydraulics result from precision in the design and fabrication of the prosthesis.

Shiley 100A Oxygenator

The Shiley 100A has demonstrated superior performance. Heat exchanger performance factor as high as 0.7. Blood flow range 1 to 6 liters per minute. Gas to blood flow ratio 0.6 to 1.0:1. Look to Shiley for Total, Consistent Performance.

Shiley®

Shiley Inc.
17600 Gillette Ave.
Irvine, California 92714
(714) 979-0500
Cable: SHILEYSLIRIN
Telex: 68-5585

Compliments

of

ETHICON, INC.

Innovators in wound closure

Compliments
to the
Class of 1980
from

DURHAM MORNING
HERALD
AND
THE DURHAM SUN

MANNELLA'S
Restaurant
& PIZZERIA

Where it All Began,
And Keeps on Going-
"Always the Best,
The Duke Place, the Original . . . ."

A Duke place

THIS SIDE UP®
Restaurant & Tavern

INTERIOR
DESIGN
ANTIQUES-
ACCESSORIES
FURNITURE,
DRAPERIES
CARPET — ETC.

PAINTING-
PAPERING
RESIDENTIAL
COMMERCIAL
INDUSTRIAL

CLAUDE M. MAY, INC.

682-9348

1101 W. MAIN ST.

ALAMANCE COUNTY HOSPITAL, INC.

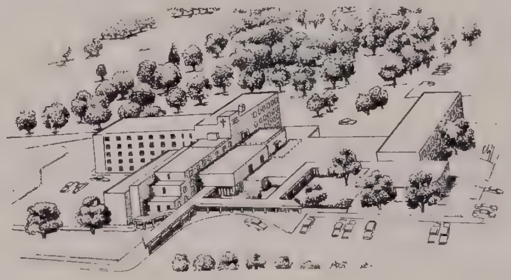
BURLINGTON, NORTH CAROLINA

Stay in the Piedmont and settle in Alamance County where you and your family can enjoy the best of both worlds — small town living with easy access to major medical and cultural centers.

Our 143-bed hospital offers substantial life-saving equipment and services, including a CCU, an ICU and around-the-clock emergency services. We are equipped for nuclear medicine, polytomography and ultrasound.

Our fifty-four staff physicians believe that Alamance County is a fine place to practice. If you would like more information, please write or phone:

Chief of Staff or Administrator
Alamance County Hospital
PO Box 3157
Burlington, North Carolina 27215
(919) 228-1371 Ext. 500



HOWELL MANUFACTURING COMPANY

Combed Cotton Yarns

CHERRYVILLE, NORTH CAROLINA

JOHNSTON MEMORIAL HOSPITAL

JMH

PHYSICIANS NEEDED

JOHNSTON MEMORIAL HOSPITAL
SMITHFIELD, NORTH CAROLINA

Several specialty alternatives exist in our small coastal town. Our 180-bed hospital is located 25 miles from several metropolitan areas, yet far enough away to avoid big city problems, excellent climate.

Direct inquiries to:
Terry Carson, Administrator
Johnston Memorial Hospital, PO Box 1376
Smithfield, North Carolina 27577
(919) 934-8171

Upjohn

Medicine…
designed for health…
produced with care.

PPS **Physicians Planning Service Corp.**
OF CONNECTICUT

NARI

NATIONAL ASSOCIATION OF RESIDENTS AND INTERNS

Low-Cost Trips/Economic Seminars
Major Merchandise
Brand Name Tires
Overseas Car Package Plan
Going-Into-Practice Loan

(with a one-year deferred principal repayment option)

In-Training/Military Loan
(featuring convenient deferred principal repayment options)

Senior Medical/Dental Student Loan
(with deferred principal repayment features)

New Car Purchase/Rental/Leasing Disability
Up to $3,500 in monthly benefits available/Guaranteed renewable until age 70/"Your Specialty" coverage/Choice of: Plan A (Level premiums to age 70), or Plan B (Step-rated premiums)

In Hospital Income
Benefits payable from the first day of hospitalization/ As much as $100 per day available for as long as 500 days.

Major Medical
Your Choice of two plans: Up to $25,000 or $250,000 of protection (after a deductible has been satisfied) to supplement any basic medical plan you may now own.

Term Life
NARI Term life (Up to $150,000 of protection)
NAPS Life with dependents' coverage (up to $200,000 of protection).

Insur-All
Up to $150,000 of protection/Available to both healthy applicants and those with a problem medical history.

Travel/Accident Policy
Up to $100,000 of coverage while traveling anywhere in the world by any means of transportation.

Contact:

PAUL JANSEN
(for free brochure)

682-3286
Durham

828-4503
Raleigh

NARI
LOAN &
DISCOUNT
PROGRAMS

NARI
GROUP
INSURANCE
PLANS

THE COLLEGE SHOP

1105 West Main Street
1 Block from East Campus

Come in and see Our Great
Selection of Women's Fashions

triangle TRAVEL AGENCY
COMPLETE TRAVEL SERVICE

TOURS & CRUISES

DOMESTIC & FOREIGN
TRAVEL ARRANGEMENTS

AIRCRAFT CHARTER SERVICE
AND AIRLINE TICKETS

(919) 682-5521

W. MAIN AT MORGAN & WATTS ST.

MEMBER OF
ASTA
AMERICAN SOCIETY OF TRAVEL AGENTS, INC.
THE SEAL OF DEPENDABLE SERVICE

ROWAN MEMORIAL HOSPITAL
SALISBURY, NORTH CAROLINA

A fully accredited
324 bed acute care hospital
Building project underway
Computerized Tomography
200 miles from the Coast
100 miles to snow ski country
A short distance from Charlotte,
Winston Salem and Greensboro
Continuing Medical Education
Affiliated With NW AHEC &
Bowman Gray School of Medicine
Library/Learning Resource Center
A TOUCH OF CLASS
Atmosphere of Historic Salisbury
A liberal arts community
Between Interstate 85 and I 40
CALL COLLECT: M.E. Bullard, Director
704/636-3311

Congratulations and best wishes
to
Duke University School of Medicine
on the 50th anniversary
of its founding.

CUMBERLAND COUNTY HOSPITAL SYSTEM, INC.
Fayetteville, North Carolina

Cape Fear Valley Hospital
Highsmith-Rainey Memorial Hospital
Southeastern Regional Rehabilitation Center

CRAVEN COUNTY HOSPITAL

NEW BERN, NORTH CAROLINA

PROGRESSIVE COMMUNITY, CLOSE TO RALEIGH, RICH IN COLONIAL HISTORY. LOCATED AT THE JUNCTION OF TWIN RIVERS AND ONLY 45 MINUTES FROM THE OCEAN. THE AREA OFFERS UNLIMITED WATER RECREATIONAL ACTIVITIES YEAR ROUND DUE TO THE MODERATE CLIMATE.

THE HOSPITAL IS A 248 BED ACUTE CARE GENERAL OFFERING MAJOR MEDICAL SPECIALTY SERVICES. FULLY ACCREDITED WITH EXPANSION PLANNED FOR THE NEAR FUTURE.

TO EXPLORE FUTURE POSSIBILITIES-
WRITE OR PHONE

LONNIE MOORE —
ADMINISTRATOR
PO BOX 2157
2000 NEUSE BOULEVARD
NEW BERN, N.C. 28560
(919) 633-8122

"PEOPLE HELPING PEOPLE"

SOUTHLAND ASSOCIATES

212 Corcoran Street Durham, NC Telephone 688-8121

Developers and/or Sales Agents for the most delightful and livable subdivisions

Experienced Insurance Specialists
For Every Business and Personal Requirement
(INCLUDING LIFE)

ALL KINDS OF BONDS

Expert Analysis Immediate Coverage
Time Payments

Representing the strongest, most dependable companies in the nation. Call for a personal appointment.

Renting? Or want to rent?

Whether you have rental investments, or are looking for a home or apartment to rent, talk to our Property Management staff. We represent some of the finest rental properties in the area.

WHEN YOU DEAL WITH THE BEST
YOU GET THE BEST DEAL

Insurance
John Chatham, Sr. V.P.
John Dominick, V.P.
Judy Adcock
Fred Callaway
Rick Gamble
Jim Huckabee
Ron Jolley
Buck Noblin
Tom Trent
Duke Williams
Vernon Browning, Off. Mgr.

North Durham Office
Mickey Fogleman, Mgr.
Lucy Collier
Phil Dunlap
Mike Long
Carol Martin
Jerry Oakley
Merele White

Real Estate
Buddy Whitfield, Sr. V.P.
Carroll E. Brooks, V.P.
Jim Boyd, Commercial Sales
Jean Cooke
Karin Haddad
Gus McIver
Don Newman
Wayne Poe
Lib Steel
Tom Upchurch
Ronnie Yergan

And in Chapel Hill
Sue Gould, Co-Mgr.
Dave Brown, Co-Mgr.
Betty Brewington
Nanette Fields
Barbara Murfin
Myra Waud

Management and Rentals
Dan German, Sr. V.P.
Curtis Crutchfield
Dave Korman
Larry Leffers

Maintenance and Repairs
Paul Hall, V.P.

Congratulations
to the
Class of
1980

Duke University Medical Center Bookstore

Seeley G. Mudd Building
Post Office Box 3102
Durham, North Carolina 27710
919-684-2717

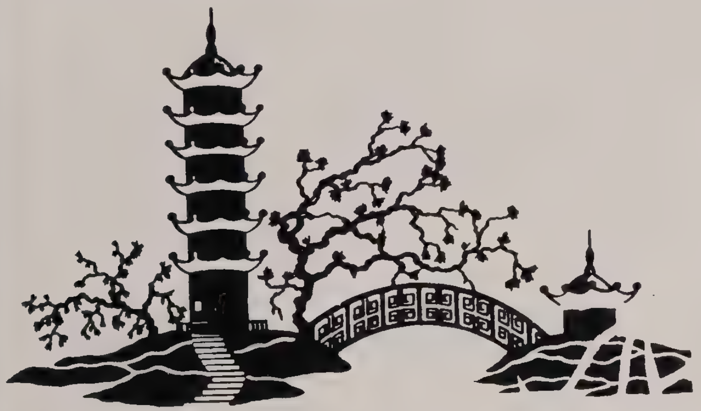
The New

China Inn

John and Sue . . . after graduating from Duke University, decided to make Durham their home and have recently purchased the China Inn Restaurant. They invite you to visit them and enjoy for yourself the new decor, daily luncheon specials, evening dining or a leisurely drink at the end of an evening.

DAILY LUNCHEON SPECIALS
BANQUET ROOM SEATS 100

SZECHUAN
HUNAN
PEKING
CANTONESE



2701 Hillsborough Road, Durham, NC 286-2444 286-9007

MANNELLA'S
Restaurant
& PIZZERIA

**Where it All Began,
And Keeps on Going-
"Always the Best,
The Duke Place, the Original . . . ."**

A Duke place

THIS SIDE UP®
Restaurant & Tavern

Budget
rent a car

Reservations, call:

Worldwide
1-800-228-9650
Raleigh-Durham Airport
782-2283

JIM'S

PARTY STORE, INC.

"Low Prices & Most Complete Selection"
International Selection of Domestic &
Imported Beers, Wines & Champagne
Fancy Foods & Party Set-ups
Keg Beer & Glassware
Ice-cubed, Crushed & Block

We deliver
286-4500

SINCE
1967

Two Blocks from Duke at Trent & Hillsborough

SHANGHAI RESTAURANT

lunch and dinner menus serving. . . .

Four Styles of Authentic Chinese Cuisine

MANDARIN, SZE CHUAN, HUNAN and CANTONESE

3421 Hillsborough Road in King's Plaza
for reservations or take-out call 383-7581

Best Wishes From

SANDOZ

SANDOZ PHARMACEUTICALS

East Hanover, N.J. 07936

Medical Sciences Liason
Sandoz Pharmaceuticals

Interest/Checking.℠ Now you can have both.

You like the freedom and convenience of a substantial checking account balance. But you also like the interest your money could earn in a savings account.

With Wachovia *Interest/Checking*℠ you can have both.

It works like this. Your checking account deposits go into a special interest paying account. As you write checks, we transfer your money from this account to cover them.

You have the convenience of a large checking balance, the earning power of daily interest.

Wachovia *Interest/Checking*. Talk it over this week with a Wachovia Personal Banker℠. And start earning interest on all the money you have in the bank.

HERE'S WHAT YOU CAN EARN WITH INTEREST/CHECKING℠

Average Monthly Balance	Your Monthly Interest Earnings	Your Annual Interest Earnings
$ 2,000	$ 8.65	$107.79
$ 4,000	$17.30	$215.59
$ 6,000	$25.94	$323.38
$ 8,000	$34.59	$431.17
$10,000	$43.24	$538.96

Based on a 30 day month

By maintaining a minimum balance of $1,000 (or an average balance of $2500) you eliminate checking account service charges. In any month in which your balance fails to meet one of these requirements, there will be a charge of $2.00 plus 15¢ per check/item paid.

Wachovia
Bank & Trust

Member F.D.I.C.

Blue Ridge Hospital System

Spruce Pine, N.C.

- A Two Hospital System
  Spruce Pine Community Hospital
  Burnsville Hospital and Health Care Facility
- Approximately 50 miles from Asheville, NC
- CAH Accredited
- For Further Information:
  Write: Hospital Administrator
  125 Hospital Drive
  Spruce Pine, NC 28777
  Call: (704) 765-4201

SAM'S QUIK SHOP

Erwin Rd. at
East-West
Expressway
286-4110

- Beer
  Domestic and Imported
- Wine
  One of the Largest Selections Around
- Special Party Prices on Large Party or Wine Orders
- We Deliver
- Groceries
- Newstand
  Out-of-Town Newspapers
  Hundreds of Magazines

Recent Taste Test demonstrates the Superiority of Our Brand
The man on the left is tasting Our Brand; on the right, theirs
•You be the Judge!•
Oxberry Farms • Newark, NJ.

COMMERCIAL RESIDENTIAL

Birmingham Construction Company

N.C. License No. 2379

GENERAL CONTRACTORS SINCE 1946
17 Ashley Road
DURHAM, NORTH CAROLINA 27704

Telephone 477-4712

Birmingham Consultant Services

- EVALUATION OF NEW CONSTRUCTION
- EVALUATION OF OLD HOMES
- ADVISORS ON CONTRUCTION DEFICIENCIES
- GENERAL CONSTRUCTION PROBLEMS

George W. Birmingham, Jr.

Participating Contractor
for the Duke North Hospital

George Birmingham, Jr. *Andy Birmingham*

DUNN REAL ESTATE

1014 Broad
Durham,
N.C.
(919)
286-3477

SALES • APPRAISALS • RENTALS
CUSTOM
CONSTRUCTION • ACERAGE

Fit For A King **PIZZA PALACE**

2002 Hillsborough Rd.
at 9th. 286-0281

mon.-thurs. 11am-11pm
fri. until midnight
sat. 4pm-midnight

VISA master charge

Happy 50th Anniversary

ALL POINTS RELOCATION

CHESSON REALTORS ®

NEW HOMES • RESALES • LOTS
LAND DEVELOPMENTS • INDUSTRIAL
RESIDENTIAL • COMMERCIAL • RENTALS

383-1550

Jean Wright-GRI	489-5007	Horace Clark	471-3242
Margaret Purser	489-7788	Susie Leaming-GRI	489-5217
Paul Booth	477-7137	Craig Morrison	471-1213
George Gaston	477-3636	Sandy Allen-GRI	Sales Mgr.

Corner of 15-501 and Morreene Road

Century 21 ®

We're The Real Estate Professionals For You.

Best Wishes to Duke Medical Center
On Your 50th Anniversary and Opening Duke North

We'll give our word to you.™

CENTURY 21
HAYWOOD DAVIS REALTORS, INC.
1010 Broad Street
286-2121

CENTURY 21
CREATIVE REALTY, INC.
5274 North Roxboro Rd.
477-0411

CENTURY 21
SHOWCASE OF HOMES
2722 Chapel Hill Rd.
493-2424

CENTURY 21
RTA ASSOCIATES, INC.
Highway 54, RTP
544-3761

CENTURY 21
AMERICAN HOMES, INC.
1316 Broad Street
286-7774

CENTURY 21
BOB GUNNER REALTY
4007 Roxboro Road
471-1521

CENTURY 21
M.D. FLETCHER ASSOC.
3205 Guess Road
471-1596

Each office is independently owned and operated. Equal Housing Opportunity.

1930

Duke Builds a Great New Hospital and J. Southgate & Son Is 58 Years Old

The Great Depression was closing in, but Duke University's majestic multi-million-dollar campus continued to rise on the wooded hills west of Durham.

It was a far cry from the 1838 one-room log cabin known as "Brown's School House" over in Randolph County—later becoming the same "Trinity College" that was brought to Durham in 1892, packed into a single boxcar.

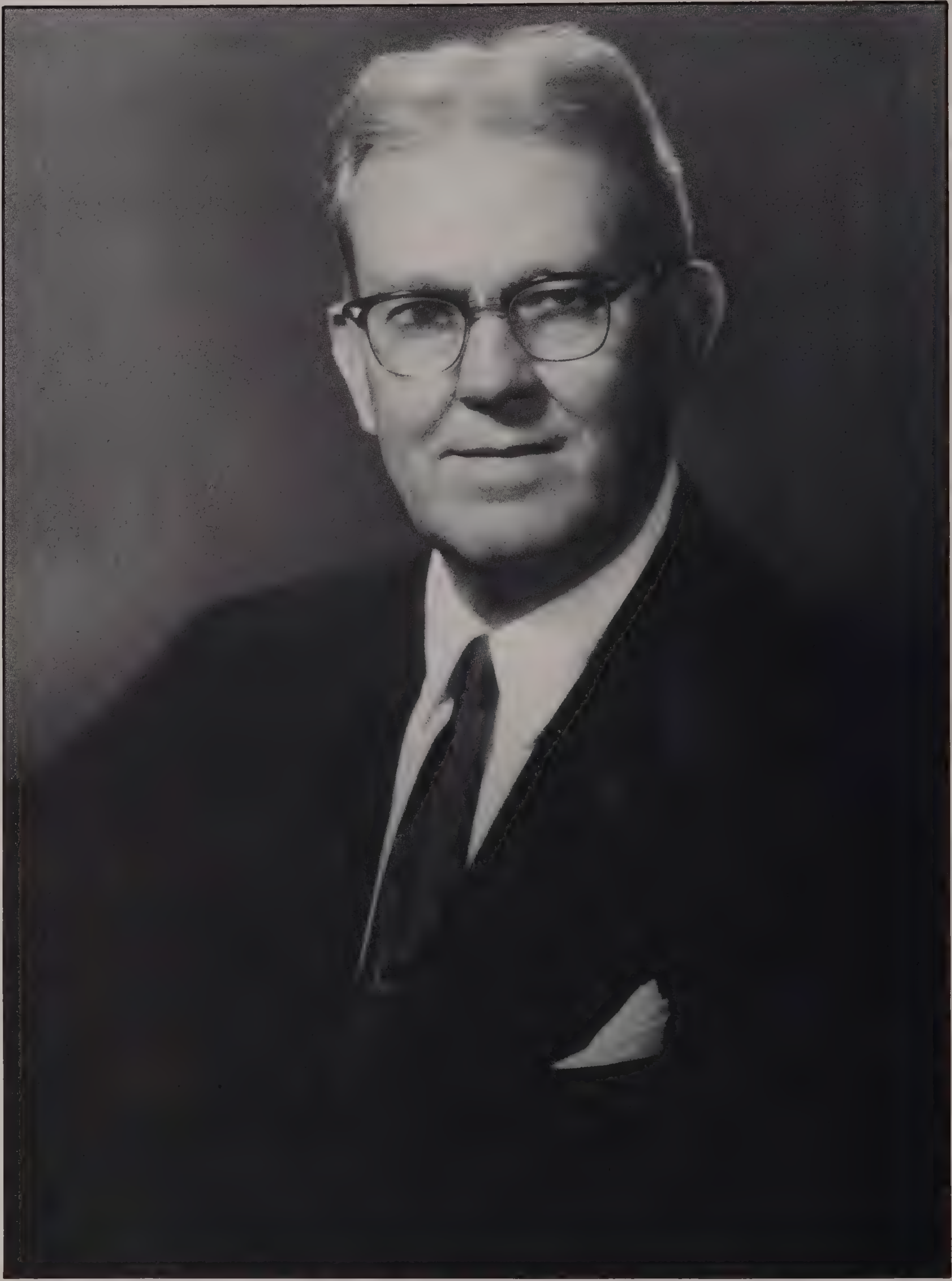
Nearly forgotten is that the school almost by-passed Durham and located in Raleigh, where money and land already had been donated. But Durham leaders like Julian S. Carr, Washington Duke and James H. Southgate launched a hasty community campaign that successfully brought the school to Durham instead.

J. Southgate & Son is proud to have had a hand in bringing Duke University to Durham, and the privilege of helping to guide its insurance programs since that time.

J. Southgate & Son
INCORPORATED
1013 Broad St., Durham, N.C. 286-2905

YOUR Independent Insurance AGENT
SERVES YOU FIRST

MEMORIAL



J. DERYL HART

1894-1980

Deryl Hart was born on August 27, 1894 in Buena Vista, Georgia, the son of John Deryl and Fannie Walter (Mathews) Hart. From the earliest days he was trained to recognize the importance of hard work and thoroughly enjoyed this feature of life throughout his long and successful career. He attended Emory University and graduated cum laude with election into Phi Beta Kappa (A.B. 1916). He remained for graduate work in mathematics (A.M. 1917) and was then accepted into the Johns Hopkins University School of Medicine and graduated in the class of 1921.

While in medical school at Hopkins, he had the privilege of being a student of William S. Halsted and upon graduation, Dr. Halsted appointed him to one of the prized internships in surgery. He spent a year in surgical pathology and completed the residency program in 1929 under Dr. Halsted's successor, Dr. Dean Lewis. He remained on the faculty at Hopkins for a year and was then offered the position as the first Professor and Chairman of the Department of Surgery at the newly formed Duke University School of Medicine.

Although Dr. Hart was only 35 at the time of his appointment, he rapidly became a very highly respected and admired leader in the new school. Of that era, one of his Chief Residents was to write later:

> I do wish to acknowledge on behalf of our group the fine example of craftsmanship and sound surgical judgment and knowledge personified by Dr. Hart. During his active teaching days, which corresponded to my period of training, he was the one surgeon that the resident staff looked to as an example of how a surgical procedure should be properly carried out. In endeavoring to emulate his technique, I am sure we all became much better surgeons. His vast fund of knowledge of surgery and recall was a source of awe, as well as an inspiration.

One of the members of the surgical faculty of that day summarized it well saying, "He literally devoted his life to the development of his School and his Department, combining qualities of leadership, surgical skill, business acumen, personal integrity, and judgment, and an ability to pick an able staff, to build one of the leading Departments of Surgery in this country."

Despite the fact that he began the chairmanship of the Department during the Great Depression, he responded to the critical nature of the times by developing with his colleagues a University Medical and Surgical Diagnostic Clinic, and his plan and modifications of it have since been widely used in many centers throughout the nation. The plan has been eminently successful at Duke and has allowed the faculty to make its own plans and fiscally to support teaching and research from their own generated funds. Deryl Hart described the philosophy and actual practice of this unique plan together with a history of the Department of Surgery in his monograph entitled "The First Forty Years at Duke in Surgery and the P.D.C." This was published in 1971 and is a scholarly and beautifully written account of the entire subject.

Throughout his career Dr. Hart was recognized as an unusually skillful surgeon who consistently obtained excellent clinical results. He possessed unique abilities in surgical diagnosis and had impeccable surgical judgment. His innovative contributions in the management of empyema, his monograph on surgery of the hand, and his research and development of ultraviolet irradiation in the prophylaxis of operative wound infections are well known. He was a member of the Founders Group of both the American Board of Surgery and of the American Board of Thoracic Surgery. He was elected a member of the American College of Surgeons and served as a Governor, of the Southern Society of Clinical Surgery and served as Vice President and President, of the American Association for Thoracic Surgery, the American Surgical Association, and of the Southern Surgical Association of which he was elected Vice President and subsequently President.

In 1960 when the University found itself in a difficult administrative controversy, Dr. Hart responded to the Trustees' call that he lead the institution through a turbulent era. As a result of his determination, his sound judgment, and hard work, he reversed the situation and greatly enhanced the character and image of Duke in an impressive way. Faculty salaries rose to rank among the top few universities in the nation, and the number of Distinguished Professorships rapidly doubled. Of these achievements one of the senior Trustees was to say: "I believe there is no one who, during the particular time Dr. Hart served as President, could have accomplished so much for the advancement of Duke University."

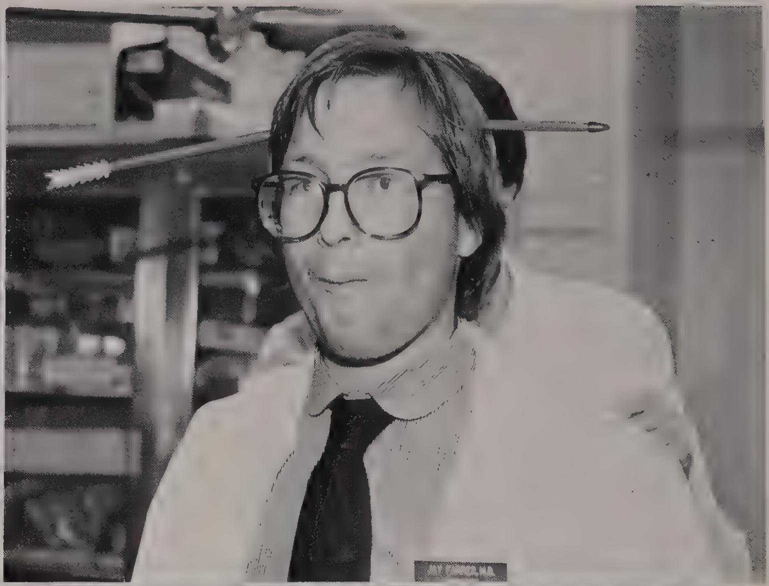
These are but a few of the many contributions which he made. Despite this combination of achievements, which led him to the pinnacle of success, nothing excedes the admirable personal attributes of this very understanding and warm gentleman, a man with a unique combination of gentleness and strength. Despite his many professional responsibilities, his love of family was very well known in the Duke community. A devoted husband to a wife who was constantly by his side, all knew Dr. Hart's convictions in this respect. Indeed, he chose to say in the introduction to his often quoted monograph about the Duke University Medical Center: "This book is dedicated to my wife, Mary Johnson Hart, whose encouragement, suggestions, and help account for many of the accomplishments for which credit has been given to me."

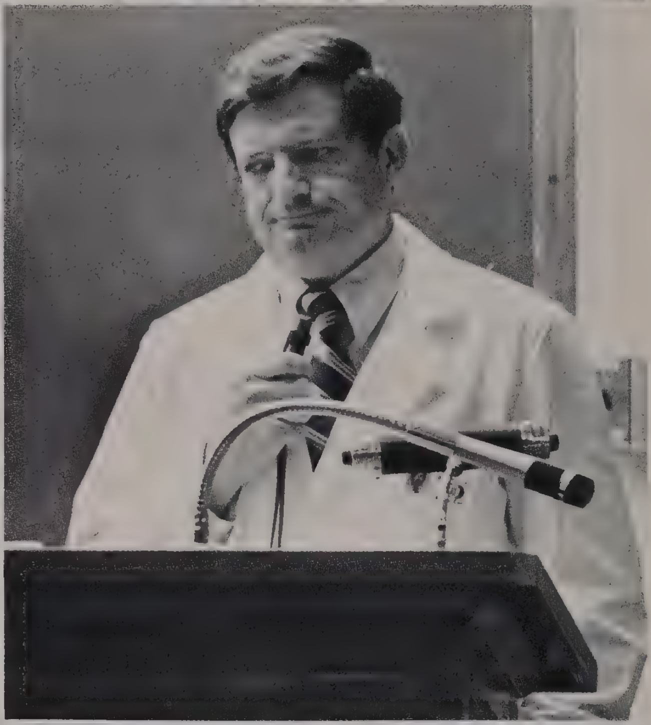
In addition to his wife, Dr. Hart is survived by six outstanding children, Dr. Elizabeth Hart King, Mrs. Julia Hart Warner, Dr. Julian Deryl Hart, Jr., Dr. John M.H. Hart, William J. Hart, and Mrs. Margaret L. Harrison, and 19 grandchildren. Theirs has been a remarkable family with an unusually close life at home where special traditions included all members gathering for the evening meal, frequent family picnics, the participation of the children in many happy social events at the Harts' beautiful home at 2324 Duke University Road, and the vacations at their summer home in the mountains at Roaring Gap, North Carolina. An exemplary family in every way, the Harts have a wide circle of genuine and admiring friends.

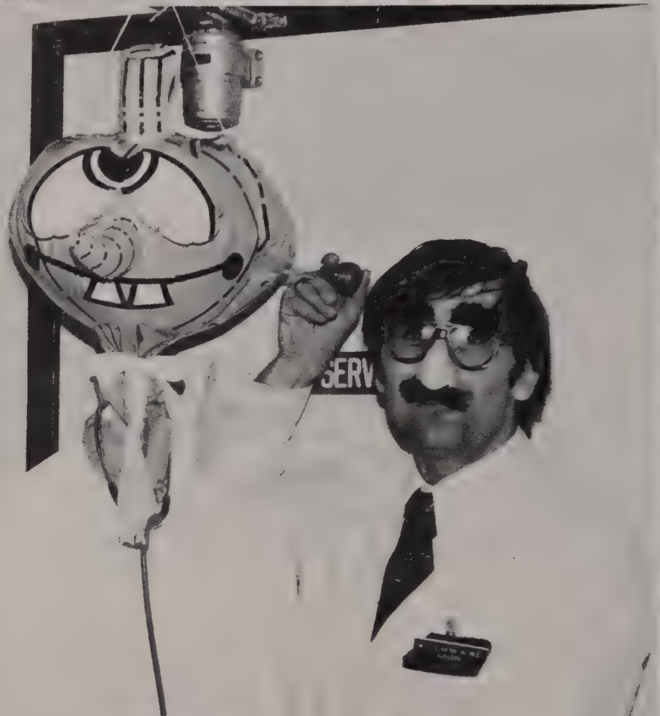
One of Deryl Hart's foremost characteristics, devotion to hard work, deserves particular emphasis. Several years ago, in response to a reporter's question concerning his philosophy of life, Dr. Hart said, "Set your goal high, if you think you can do it, and finish what you start." There is no doubt that he set very high standards for himself from the beginning, and he admirably completed each goal he undertook. He leaves a full and rich life which has already served as an example for many. Surely this will continue as his tall shadow extends across the lives of his many appreciative students, residents, and admiring friends.

David C. Sabiston, Jr., M.D.

GALLERY







DEDICATION

AESCULAPIAN/80, the 50th anniversary edition of the Duke Medical School yearbook, is with much thought and great pleasure, dedicated to the Class of '81, to my family, and to my fiancé, Marsha Adams.

Nowhere could I have found a group that would have given of themselves as much as my classmates did this year. Over half of them participated in some fashion in the production of this book. From typing to selling ads and books, from designing layouts to writing essays, from interviewing administrators to beating on the door of every department chairman in the medical center, the Class of '81 has been there, ready, able and willing to help in any and every possible capacity. Without their support there simply would not be an *AESCULAPIAN/80.*

Another group whose assistance was equally invaluable was that of my family. The love and the moral and fiscal support that my family provided enabled me to continue when times were difficult, schoolwork was mounting, deadlines were nearing and literally hundreds of pages remained unfinished. Especially important was their understanding when I would cut my vacations short or not come home at all because of work that had to be done on the yearbook. This word of thanks extends not only to my parents, Dr. and Mrs. John Lucas, Jr., my brothers, Aubrey and Robert, and my sisters, Tell and Beth, but also to my grandparents, Dr. and Mrs. John Lucas, Sr. and Mrs. Aubrey Bell, all of whom were a great source of inspiration.

Last, but probably most of all, this yearbook is dedicated to Marsha Adams, or by now Marsha Lucas. Little did she know that when she said yes to my proposal that she would be marrying not only a third year medical student but also a 516 page yearbook. Working two days and seven nights a week, frequently until 2 a.m. for over two months, Marsha was a source of both unending labor and continuous encouragement. By copying layouts, typing copy sheets, proofing layouts, writing essays, and performing countless other tasks, she contributed to almost every section in this production. In addition she endured the seemingly endless nights on the 6th floor Davison Building and my all-too-often shortened temper. For all her love, patience and hard work she is included with those mentioned above to whom the *AESCULAPIAN/80* has been dedicated.

John Lucas, III
Editor-in-Chief

Well this is it, the last page of a 516 page albatross that has been hanging around my neck for the past year and a half. No longer will my classmates have to run when they see me coming, trying to avoid being recruited for the endless number of tasks that had to be performed. Yes, the courtyard dining room is again a safe place to relax for lunch. Gone are the days of folding and placing address labels on 1,000 letters of solicitation. You who are bashful can again show your face without fear of that ever-present "kerflash" which signaled another of the eventual 4,000+ pictures which I took. My camera has been retired. Also never to be heard again is that worn-out reply of "Working on the yearbook, what else," when asked what I was doing. To my teachers who all too often were looking at either the top of my slumped-over head or my eyelids which were loosely closed over a pair of bloodshot eyes, I offer my apology. The reason was not a sleep-inducing lecture but a darkroom session that ended at 3 a.m. or a design and layout session that frequently ended even later.

This book is truly a monument to the dedication of all those who gave so freely of their time. Literally 1,000's of hours of labor have gone lovingly into this project. It can only be considered a work of love because there was certainly no monetary reward, no honors grade in any course, and no choice residency position to reward those who made this possible. The list of those who contributed is long, but I will do my best to acknowledge the assistance of those whose efforts are and were greatly appreciated.

Mr. John Furlow deserves special thanks for the many hours of counseling that he spent in taming my wild ideas for layout designs, but more importantly he deserves recognition for his original design of the 50th anniversary seal and his assistance in the beautiful cover design. Next I'd like to thank Dr. Jim Gifford to whom we turned so frequently for information and references for the historical material in this book. He was a veritable gold mine of information, and if he could not provide an answer, he directed us to someone who could — we were never turned away empty-handed. In the same breath, the University Archives in Perkins Library and the Medical Center Archives in Mudd Library deserve a round of thanks for furnishing us with innumerable old photographs and manuscripts. The Audiovisual Department deserves acknowledgement for putting up with my constant presence and ceaseless demands for instant orders. They were especially helpful in duplicating pictures from books and the photographs sent in by alumni. The magnificent opening photograph of the interior of the Chapel was taken by Mr. Lewis Parrish, and Mr. Chuck Lewis gets credit for most of the beautiful scenery shots of North Carolina in the opening section. The dramatic aerial photos of the campus were taken by Cindy Lewis. On the financial end, Ms. Pat Cross deserves credit for making order out of chaos and keeping an impeccable set of books. Dr. Tommy Thompson, who patiently listened to my tirades about the University-inspired bureaucracy that frequently entangled the finances, should be recognized for his role as financial advisor. Ms. Jeannie Lee, Ms. Kim Terrell, and Ms. Joyce Umstead deserve special thanks for frequently having to act as my personal answering service and for all the thousands of "little" favors that frequently were not so little.

Communication with the alumni could not have gone more smoothly, and for this a well-deserved expression of thanks goes out to Ms. Janet Sanfilippo, Ms. Linda Patton, Mr. Bucky Waters and Dr. Jay Arena. For all their help in providing the names, addresses, and specialities of 6,000 graduates, mailing letters to over 5,000 alumni, and assisting in dozens of other requests, these people were invaluable. To Dr. Bill Anlyan, Dr. Arthur Christakos, and Dr. Shirley Osterhout, I express my gratitude for finding time in their busy schedules to provide guidance and learned counsel on matters of protocol and politics, and frequently to just listen to my gripes. Many others contributed and to them I say thanks: Mr. Robert Winfree, Mr. Bernard McGinty, Mr. Robert Byrd, Mr. Tom Hurtgen, Ms. Ann Rimmer, Dr. Ewald Busse, Mr. Toby Bethea, and Ms. Ester Walden. Anthony Limberakis, the editor of the *1978 Aesculapian,* must be recognized for his efforts in 1978 which sparked my interest in this project and laid the necessary framework for our success this year.

I regret that only a small amount of space remains for acknowledging the contributions of those who were truly responsible for the success of this project — the students. One group deserves special recognition for their tremendous sacrifices of time and energy. When deadlines were near, when extra work needed to be done, regardless of the hour or previous commitments, either socially or academically, these people were always there. Unquestionably their efforts were the major reason for the success of this book. Pam Sholar, Ann Lansing, Jan Porter and Marsha Adams are the tireless workers to whom I am forever indebted.

Others who deserve mention for their commitment of time and energy are assistant editor: Jeff Davis; section editors: Mike Rocco, Laurie Dunn, Febe Brazeal, Candice Grace, Pam Reynolds, Frank Spence, Jackie Rutledge, Tom Collier, Barbara Hodge, Berrylin Ferguson, Gina Michael, Meg Richardson, Jim Walsh, and Kemp Kernstine; assistant section editors: Val Lightner and Rosanne Pollack; caricatures: Renata Albrecht; alumni sales: Janet Kinney; student and faculty sales: Jim Segars; ad sales: Kemp Kernstine and Faith Birmingham; photography: Mitch Silverman, Bill Dodson, David Katz, Bill Hazel, Graham Barden, Jim Califf, Val Lightner, Phil Zeitler, Larry Wu and especially Bruce Murdoch. The following need to be thanked for their contribution of typing, writing essays, and generally being handy: Deb Clapp, David Harlan, Gwen Arens, Beth Murdaugh, Pete DuLuca, Nanny Dunlap, Lea Sewell, Jeff Sourbeer, Hugh Morris, and especially Linda Glaubitz, Eddie Miller and Quay Snyder. My apologies to those whom I omitted, and my sincere expression of gratitude to all who aided in this production.

Finally I hope that you realize that the *AESCULAPIAN/80* is not only a tribute to the first 50 years of Duke Medical School, but it is also a profit-making venture that should net an extimated $12,000-$15,000, which will be used to provide student loans to defray the rapidly escalating costs of medical education. After you have read this and realize the countless hours that were needed to produce this book, I hope that you will express your appreciation to those whose labors have brought you the *AESCULAPIAN-80.*

John Fair Lucas, III
Editor-in-Chief
AESCULAPIAN/80